

8-1932

Journal of Accountancy, August 1932 Vol. 54 Issue 2 [whole issue]

American Institute of Accountants

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Recommended Citation

American Institute of Accountants (1932) "Journal of Accountancy, August 1932 Vol. 54 Issue 2 [whole issue]," *Journal of Accountancy*. Vol. 54 : Iss. 2 , Article 10.

Available at: <https://egrove.olemiss.edu/jofa/vol54/iss2/10>

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The JOURNAL *of* ACCOUNTANCY

Official Organ of the AMERICAN INSTITUTE OF ACCOUNTANTS

A. P. RICHARDSON, *Editor*

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VOL. 54

AUGUST, 1932

No. 2

EDITORIAL

The Little Foxes That Spoil the Grapes

In the wake of every depression follows the irksome necessity of increased taxation. Somehow the revenues of government, partly shut off from their original sources, must be augmented, or, failing that, there must be an unbalanced budget and consequent financial chaos. The United States of America was almost the last of the important civilized powers to feel the sharp pangs of a world-wide famine—but that does not make the acuteness of the pain any the less. So we have come into the time of paying, and we must pay upon a host of things that we have long regarded, or perhaps always regarded, as not the kind of things upon which taxation could be based. In a word, we are confronted by a schedule of little taxes which will annoy and pester us probably for some years to come. The greater taxes we face with set teeth, but the picayune assessments which are laid upon us are certain to make us restive and restless unless we bring to bear a great deal more of philosophy than most of us have been in the habit of exercising. Accountants are given, above all men, to consideration of what might be called the detail of economy. They are so closely in touch with the intimate affairs of many businesses that they are overscrupulous at times in their attention to small matters. In the present case there may be a strong temptation to point out to clients ways which will save little amounts of money, as well as some important methods of avoiding a too heavy burden of taxation. Already there have been rumors in many kinds of business of small changes in practice and custom

designed solely to avert the incidence of an almost infinitesimal tax. The great rush of mail immediately prior to the increase of postal rates on July 6th was merely a demonstration of the eagerness to save a few cents here and there. Many of the savings effected were of substantial magnitude, but we are speaking now of the man with fifty or a hundred letters rushing ahead out of all logical time to pay a two-cent rate instead of a three, a consequent saving of one or two dollars and an expenditure of a great deal of nervous energy and perhaps some extra office cost. There has been consideration of various ways by which the tax of two cents on each cheque could be avoided. It would not be astonishing to learn of firms employing office boys to run about and make cash payments of small items so as to avoid the tax of two cents on each cheque. This, if done, will serve to reduce the number of unemployed by increasing the number of office boys required, but it will scarcely effect a saving to the company or person adopting the system. Taxes are written into the laws of the land in order to meet the cost of carrying on, and it does not seem quite the part of patriotic citizenship to be endeavoring by hook and by crook to avoid the payment of even the least item in the whole category. Of course it would be absurd to argue that every man should pay as much tax as he can possibly find a way of paying, but that is widely different from the movement, which now seems to be afoot, to think of ways by which a cent can be kept from the treasury of the country.

**Cheque Tax a Simple
Matter**

Incidentally it may be mentioned that this tax upon cheques seems to be one of the fairest that can possibly be devised. In practically all foreign countries it has been employed for years, and there is no difficulty at all in the paying or in the collection of it. There has been so much talk here of the troubles and complexities which will accompany a cheque tax that the truth seems to have been obscured. We might take a leaf out of the book of almost any other country in which modern banking is practised and make a regulation under the law providing that no cheque shall be a valid instrument unless it bear a two cent stamp. Or we could adopt the practice of buying our cheque books in which each cheque would be sealed or embossed with the amount of the tax. For each cheque sold the bank would pay to the government the two cents which was collected from the maker

of the cheque. Instead of that, it seems to be ordained that at the outset we shall go through all the cumbersome and inconvenient ceremony of a deduction from the bank account at the end of each month or some other period, and it will mean extra bookkeeping for the banker and extra bother for the depositor. It almost seems as if it were the present intention to make the collection of a cheque tax so onerous that there would be a general outcry against it, while as a matter of fact the thing can be done painlessly and almost without cost above the amount of the tax. We might even go further and adopt the foreign plan of requiring that every receipt for payment must bear a certain amount in revenue stamps of the country in order to be a valid proof of payment. Every traveler is familiar with the elaborate array of stamps which ornaments every receipt given him in practically every foreign country. The cheque tax, however, is far simpler than that, and there is no reason why it should not be thoroughly effective and become a permanent part of our taxing system.

**After All It Is Our
Government**

The government is or, perhaps it would be more accurate to say, is supposed to be a part of the property of every citizen. Most of us who are not entirely converted to the theory that anarchy is practicable believe that by the administration of government our lives are made safer, our happiness greater and the things we have are protected better than would be possible if there were no government at all. The recent demonstration of the ineffectiveness of the American system of government has no real bearing upon the question. The fact that the government is not all that it should be may be regarded merely as an indication that good government is a thing to be desired. Now, no government can carry on without abundant resources, not only of finance but of public support, and if the whole people of the country is to devote its energies during these idle days to devising methods to avoid paying what should be paid we as a nation shall be guilty of a most insane and false economy. It would be far better for every man and every woman to continue to do the things which he or she has been doing and to pay the tax which those things involve. It was in expectation that most of the people would continue to render themselves liable to these new taxes that the congress enacted the new scheme of taxation. One of the things that made these taxes necessary was the decline

in revenue from income taxation which fell far short of the estimate made at the time when the preceding law was written. That was nobody's fault in particular. Incomes simply ceased to exist or were so depleted that their contribution to the treasury was inconsiderable. Congress was then compelled to find other avenues by which to reach the pocketbook of the public; and so, many common and necessary acts and things were made subject to minute taxes which in the aggregate are expected to produce the required amount; but they will not do so if there be a general effort by the people of the country to avoid the payment of a cent here or ten cents there.

**"Hooray for the
Principle"**

As an illustration of the extremes to which some people are ready to go, it is interesting to record the experience of a township committee which under the state law was entitled to levy a personal property tax. An article of personal property, perhaps an automobile or a vehicle of some sort, was in storage in this township, and when the assessor went to investigate he discovered that it was owned by a person residing outside the state. An assessment was made and a bill for one dollar was sent to the owner of the property. Upon receipt of the bill the owner rose up in righteous wrath and stoutly vowed that never would he submit to so outrageous an encroachment upon his constitutional privileges. (The phrase was impressive even though its meaning was not quite clear.) He decided that he would not pay the tax and consulted counsel. It is gratifying to be able to report further that the advice of counsel was to pay the tax, and the cost of counsel was enough to pay the tax for 35 consecutive years or if invested at three per cent simple interest per annum would have provided income sufficient to pay the tax forever. That is not a fairy story, and it points an excellent moral. Many of our taxes are sadly squandered by those who have the spending of the money, and it would be possible to reduce the cost of administration of our federal, state, county and municipal governments perhaps by 80 per cent.—without loss of efficiency, such as it is. But the way to mend is not by avoidance or evasion. The way is before each one of us and we all know what it is. If we send incompetent men to congress, to state legislatures or to town councils we get exactly what we deserve. When these men impose taxes to meet their extravagances we are

still getting what we deserve, and all we can do at the moment is to pay the tax and then firmly and unitedly resolve that there shall be no more extravagance, elect careful men and thereafter reduce the weight of taxation.

**We Might Rejoice in
Tribulation**

Probably the American people will pay their tax bills fairly well. They will be much perturbed and they will wail about the injustice and the heaviness of it all, but most of them will pay; and so, after a time, we shall reach shore out of the stormy sea. But we might do it very much quicker if we would only display a little more enthusiasm for salvation. Someone said the other day that the Americans are bearing their burdens stoically. There is no general unrest. There are practically no strikes—as indeed there could hardly be when there is no work. There is no breathing out threatenings and slaughter against the government. We simply endure and hope for fair weather. But there is another way which might be better yet, and it seems that the British in this are showing us how to fare. It has been the admiration of the whole world that in spite of its terrible burden Britain seems to be getting her head above the waves, and this is attributed by many careful thinkers to the fervor of the people. They seem, most of them, to be imbued with a real desire to pay and be done with it. “Let us get rid of the damned bug-bear and then go on.” They are going down into the depths of their pocketbooks and paying taxes far greater than we have ever paid in this country, and they are doing it with what seems like eagerness in that same spirit of getting done with it. If Americans would adopt the same patriotic sentiment and each one of them do everything possible to make and maintain a balance in finance it would help us enormously out of the storm. We have not so far to go, when all is said and done. There have been worse seas and heavier winds and there must come an end some day. It would be very helpful if we could all swim with a smile on our lips. It might even bring us closer to a foothold and so to the beach of the better country.

**Audit of Government
by Government**

Accountants in one of the states in the middle west have been concerned about a proposal to create by legislation an auditing bureau to be attached to the department of education

for the purpose of auditing educational institutions, such as school boards, throughout the state. The accountants feel that the establishment of a bureau of this kind would not be productive of the results which were intended. Sooner or later such bureaus are apt to be carried into the realm of practical politics and the services which they render may become an utter farce. All independence will be out of the question after a little while. Instruction to an auditing bureau appointed by the government to audit the affairs of that government would be like asking a horse trader to pass final judgment upon the horse which he wished to sell. It has never been entirely satisfactory to entrust the investigation of governmental conditions to governmental agencies, and it would be particularly undesirable in such a case as that which is now under consideration. The whole value of audit is based upon the independent and unrelated status of the auditor.

Crackling of Thorns Several correspondents have written drawing attention to a statement, said to have appeared in an eastern newspaper, which reads as follows: "Another group of offenders is the accountants. An accountant is a bookkeeper with a vocabulary. An accountant can draw up a balance-sheet for an insolvent corporation and, to nine out of ten ordinary business men, the company will look healthy." Our correspondents are wondering whether these words were written in a facetious or a fractious spirit. Of course it is distressing that anyone who is permitted to write for a newspaper should display a lack of knowledge, but the truth of the matter is that such things have occurred. Even in our largest newspapers it is possible to discern at times a variation here and there from the absolute veracity of knowledge. Probably no one in the world except an accountant paid any special attention to the comment which we have quoted, but if anyone did happen to notice it he probably dismissed it as merely another instance of a grasping after humor. An accountant can draw up a balance-sheet which will deceive people, but that is not to say that he does draw up such a balance-sheet. He is called in to express an opinion about a balance-sheet because the public knows that his opinion is worth while. The correspondents who worry about a silly thing in print are unwise—almost as unwise as the man who wrote it, whoever he may be. If one believed everything in

the journal he would require a gymnastic mind, for in two columns side by side one may often find that some public person is both a saint and a devil—and that, we all know, is an impossible identity. It will not be necessary to go out with an ax and hunt the man who wrote the erroneous accusation against the accountant. He will be overtaken some day by the spirit of acquaintance with truth.

A young man writes to ask why the **Libraries Should Have Accounting Departments** any recent or authoritative works upon accountancy. We do not know why, but it seems probable that the cause is a lack of selective ability on the part of the library authorities. It does appear almost incredible that the public library of a city so important as that in which our correspondent dwells should have no department dealing with accountancy, and it may be that there is a mass of literature there which the correspondent has not discovered because of faulty catalogues or incompetence of the employees. On the other hand, there may be so severe a shortage of funds for the purchase of books that it has been thought necessary to leave accountancy out of the list. There are no suggestions which can be offered, except perhaps that those who are unable to obtain the reference books to which they are justly entitled should bring the matter to the attention of someone in high command, and then if no improvement took place it might be possible to organize a collective appeal which could not be disregarded by the buyers for the library. Every city, whether great or small, owes it to its population to provide text books for all the important professions, trades and industries. In most cases it has been found that where a lack occurs it is due to negligence, not to intentional disregard.

**The Accountant
as Gull**

Professional men are proverbially gullible, and accountants seem to be no exception. Perhaps it is because the very nature of their work brings them in touch chiefly with legitimate and profitable undertakings that they seem almost naïve in dealing with shrewd schemers who are seeking something for nothing. New kinds of “rackets” designed to extort small sums of money from accountants have appeared recently; and they all seem able to obtain the financial support of a few reputable but innocent

members of the profession. Such projects take a variety of forms. It may be a school, with a unique and plausible method of instruction, which invites the practitioner to become a member of its advisory faculty, or board of governors or regional committee—with the prospect of much personal gain. If he accepts, he will doubtless be given an opportunity to make a small investment. At the best, his name may be used to influence prospective investors or students. Accountants are asked to join some kind of an association, of a nature usually vague, whose principal purpose is to increase the clientele of its members. The object may be laudable—certainly the bait is tempting in times like these. A skilful salesman can paint a mental picture whose brightness may throw cold logic in the shadow. Occasionally the appeal is to sheer vanity. "On account of your standing in the community you have been selected to represent your city on the supreme council of the Parnassus Accounting Service Association, Inc. The objects of our association are to further the interests of . . . , etc. etc." A circular letter, from an unknown person, which commences in this vein almost certainly deserves no consideration. Its proper destination is the waste-basket. The most pernicious practice is the unauthorized use of the names of well-known persons. The files of the American Institute of Accountants show that fly-by-night entrepreneurs are daring enough to claim the patronage of prominent members of the profession, entirely without the right to do so. In some cases they go even so far as to publish in circular letters names of persons who have no knowledge of the organization. All this is not to say that every new project which circularizes accountants is necessarily a hoax. But any professional practitioner who is jealous of his reputation should make an exhaustive investigation before accepting any glittering invitations which arrive by mail. The more persuasive the proposal, the more suspicious ought he to be.

**A Wrong Way to
Seek Information**

A subscriber has brought to attention a form of questionnaire sent out under the signature of the president of a company which is engaged in gathering information upon the credit of various enterprises. It was addressed to a firm of accountants and was headed "Accountants' verification of the statement of financial condition of —— corporation." The inquiry contained twelve questions with various subdivisions and it was

evidently intended to elicit from the accountant a detailed description of what was done in the audit and what was the nature of the report rendered by the accountant. In the introductory paragraphs we find the following statement:

"The enclosed photographic copy of the financial statement dated . . . has been submitted by your client.

"Will you kindly assist us in completing our information on this concern by filling in your answers to the following questions and returning the form to this office. We will photograph this information exactly as it is received, and will send copies to members of the downtown and uptown credit groups and subscribers of the . . . , interested in the affairs of your customer.

"We are sending this letter in duplicate so that you may retain one for your files as a record that you have sent this information to all those interested through the . . ."

It will be noted that there is no attempt to obtain the consent of the client to the supplying of information. In other words, this concern wants to obtain directly from the accountant information which the accountant can render properly only to the client. If the client desires to have the accountant supply information to anyone it is for the client to make the request. It is alleged that this form is being used in many cases, and we desire to bring the matter to the attention of readers of this magazine and to urge them either to ignore all requests of this nature or to reply pointing out the impropriety of the question and the absolute impossibility of replying in detail. The truth of the matter seems to be that some people are becoming more and more inclined to overlook the fact of professional relationship between the accountant and his client. The sooner such a tendency is checked the better it will be for all concerned.

Air Transportation

ORGANIZATION AND ACCOUNTING

BY ROBERT F. RISELING

INTRODUCTION

Commercial transportation by air is our newest big industry. It is so new that plans of organization and accounting which are modern and now in use are products of the last two years' development.

The industry is unique among all commercial enterprises as it represents an epochal change in our lives, namely, the conquering of and use of a new agent wherein we are conveyed from point to point. In all man's ten thousand years of recorded history his travels have been confined to earth and water, until so recent a time that the start of commercial air transportation is within the memory of most people alive today. Yet who among us now has vision to foresee the amazing extent of progress that will surely occur within the next forty years? It seems doubtful, at present, that air conveyance will ever displace railroad transportation in the handling of large bulky freight; certain it is that costs must be reduced and airplanes made larger and safer before this can happen. It is probable that for many years to come the carrying of passengers, mail and light, compact and valuable freight will be the extent of the air transportation business.

There have been practically no profits from the conveying of passengers alone. Companies have accumulated profits from contracts for carrying United States government mail, although the attitude of the government indicates that air mail rates are in the nature of a subsidy granted to foster the industry. The chief reason for operating losses in passenger transportation is the tremendously high investment in aircraft and facilities for each passenger carried. This is partly due to the size and costliness of the planes in comparison to the available passenger space and partly to general fear of the public in getting their "feet off the ground." This fear is being overcome rapidly, however, as passenger statistics of the larger companies show. It seems that the future of the industry depends largely upon the working out of plans whereby planes may be safer yet less costly.

Radio broadcasting and lines of night beacons have played important parts in making air transportation safer. All large

lines now have broadcasting service reaching their pilots constantly during flight, enabling them to know of weather and fog conditions miles ahead over their flying courses. Also, large electric beacons have been established, not only at airports, but more particularly along the transcontinental lines of flight. Now one may leave his office in Los Angeles Sunday morning and be on hand for work Monday morning in his New York office.

CLASSES OF SERVICE

To provide a better understanding of the scope of the industry an outline of the various services that are being rendered by aviation companies is given. As the industry is changing and expanding rapidly this list does not pretend to be complete, but there are probably few important activities omitted. Perhaps no one company is now rendering all classes of services which are described here. There are small companies which confine their business to conducting flying schools; some furnish transportation service only; others render miscellaneous services, while some of the larger ones are active in nearly all classes of service.

The various sources of income are:

Revenue from transportation:

Carrying mail:

Through contracts with government post-office department

Passenger service:

Divided between passengers carried on mail and non-mail flights

Express and freight service:

Divided between service on mail and non-mail flights

Excess baggage charges:

Divided between service on mail and non-mail flights

Special chartered flights

Miscellaneous sources of revenues:

Hangar space rentals:

- (a) Lease covering definite space for specified duration
- (b) Monthly storage charges
- (c) Transient storage: (a) and (b) are usually billed and collected monthly; (c) should be collected before the plane leaves the hangar.

Percentages of fees collected from passengers of a lessee who uses the airport landing field

Fees charged for burning beacons or landing lights for lessee users of landing fields

- Rentals of planes to licensed pilots
- Sightseeing and taxi flights
- Flying schools
- Repair work on privately owned planes and engines
- Profits from sales of aircraft
- Profits from sales of aircraft accessories and supplies
- Gasoline and oil sales
- Photography service:

Besides regular commercial service, companies may take stock pictures of sections in rapidly growing communities and sell quantities of the pictures after elapsed periods have shown marked changes in development of the same sections. Later pictures of the same sections are taken and sold as comparisons.

- Dusting of crop pests
- Seeding crops
- Exterminating mosquitoes by spraying swamps
- Newspaper delivery
- Advertising service
- Timber cruising
- Mapping
- Forest patrol
- Airport concessions:

- Parking spaces for automobiles
- Restaurants and lunch stands
- Magazine and cigar stands
- Amusement features
- Hotels
- Parcel room storage

From the varied nature of activities, especially at the airport, it is apparent that the organization must be large enough and the accounting system sufficiently flexible to account properly for all direct costs of the activities. An intelligent and adequate system of dividing general overhead costs must also be devised so that the management may be able to discontinue or reorganize those departments which show continued losses.

ORGANIZATION

On account of the nature of the principal classes of service rendered, the organization structure, to some extent, resembles that of railroad transportation companies. In June, 1929, the United States post-office department issued a classification (revised and re-issued July 1, 1930) of accounts for contracting aviation operators engaged in carrying mail.

The classification manual appears to contain rather comprehensive accounting instructions for aviation operation, with the possible exception of miscellaneous operations and services not concerned with the carrying of mail. On the whole, however, it is an excellent guide of accounting for the operating section of the industry and its study is recommended. A copy of the department's annual report should be procured. This is based on the accounting manual but contains in addition forms for statistical information useful in the industry.

The classification appears to have been adapted from the interstate commerce commission's accounting classifications for railroads. So far as mail service is concerned the air industry will, no doubt, be influenced by governmental supervision, not only in accounting matters, but also in organization and operations. While this governmental assistance benefits air-mail carriers, the companies engaged only in furnishing passenger and miscellaneous services must work out their own salvation.

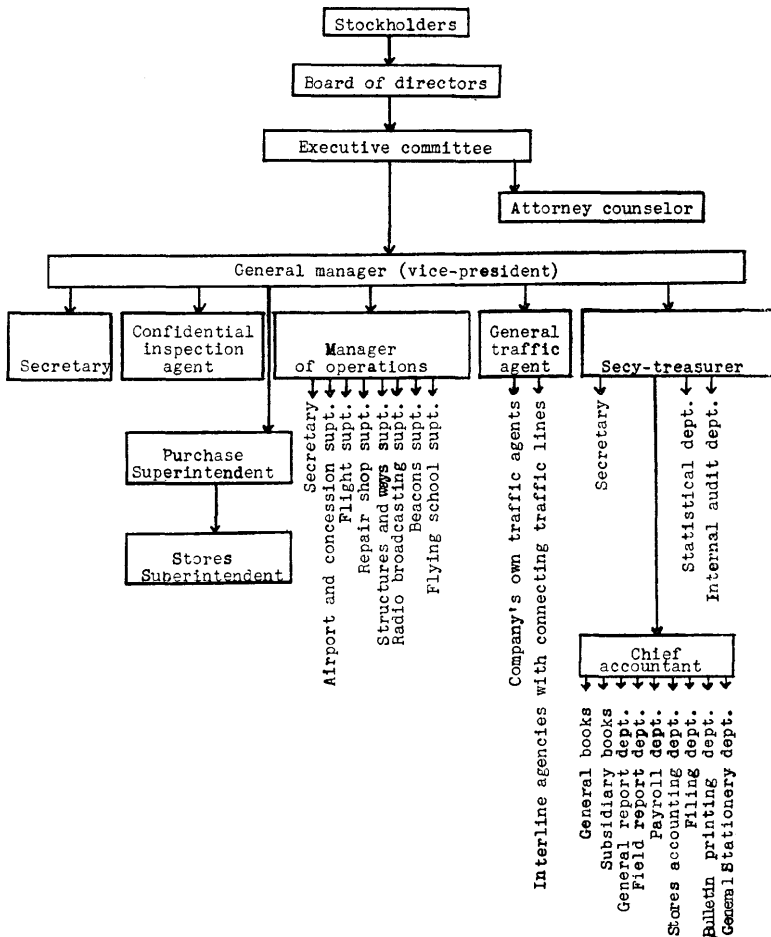
As a preface to discussion of particulars of the plan of organization, a somewhat condensed chart is presented on the following page.

Smaller companies usually have all their offices and activities concentrated at one place, the airport. While the organization of such a company is, of course, much simpler than that of one with transcontinental or international lines, still the general plan must be the same. The principal differences will consist of amplifications of the basic plan and the inclusion of features peculiar to transcontinental flights and the laws and customs of foreign countries. It should be borne in mind that the present survey deals primarily with a large organization, although it must be apparent that smaller companies can use the basic plan.

In the following description of activities of the several departments, no attempt will be made to describe minutely the work of every employee nor will the numerous necessary forms be given. It is the intention merely to outline the principal work of the departments and their coördination with each other. Such details as the reporting of payroll of employees in each department (with certain exceptions) are excluded.

Stockholders, boards of directors and executive committees function as in any commercial business. It will be of distinct advantage if the board of directors is composed of prominent business men who are taking actual part in the conduct of other businesses and participate extensively in civic activities.

CHART OF ORGANIZATION



As aviation is a new industry, advantage must be taken of all means for improving service and of generally promoting the future of the individual company and all air service in general. Consequently, provision should be made to have superintendents and department heads attend certain designated meetings of the board of directors, at which prepared papers may be presented or discussions take place. New suggestions or plans which are the direct means of creating improvements should be rewarded by some appropriate recognition.

The attorney counselor naturally deals most directly with the board of directors or executive committee, but he should also be available to officers and managers for consultation and advice.

The general manager of the company preferably should be president or vice-president. Because of the peculiar nature of the business, he will undoubtedly occupy a position of prominence in the community and, if the company is a transcontinental one, will be known nationally. Naturally he should be a big man in every way, fully equipped mentally and physically to carry on a complicated and rapidly expanding endeavor. He must also be a man who has the rather rare ability of building up under him an efficient organization to which he can delegate all details and actual operations, thus leaving his mind free to observe the articulation of the whole organization. The financing of large loans and contact with bankers may best be part of the general manager's work, thus leaving the manager of operations free to devote all his energy and attention to operations.

The entire operation of the company may be delegated to four men who, as designated on the chart, are the manager of operations, the general traffic agent, purchase superintendent and secretary-treasurer. In addition, the general manager should have available, and entirely under his control, a confidential inspection agent, whose time and activities should be devoted to following up such irregularities or to such research as the general manager may think necessary.

The confidential inspection agent (he may bear any title considered more appropriate) has manifold duties. He should be a man of native shrewdness, capable of prying quietly and unobtrusively into baffling situations and ferreting out the causes for irregularities. At times he may need to augment his activities by employing assistants. Losses in supply inventories, irregularities in reporting ticket sales, irregularities in the accounts and reports of airport superintendents, agents, etc., are suggested as part of the work of this officer. The principal condition imposed upon this officer is that he must at all times be under the control of the general manager and entirely uninfluenced by any other officer or by any department.

The secretary is, of course, a confidential agent of the vice-president and general manager.

Next in importance is the manager of operations, hereafter referred to simply as the "manager." While not imperative, it

would be of distinct advantage if the manager were an ex-pilot. An ex-flyer knows instinctively the nature of most of the daily problems that arise. He must be a man having knowledge not only in flying but also of repairs to aircraft, construction of hangars, preparation of landing fields, location of and operation of airports, routes of airways, and the purchasing (and requisitioning) of stores supplies. He should also have some knowledge of accounting, so that he can understand the significance of reports presented to him. This is a rather large order but, as the manager of operations occupies probably the most important position with regard to the success of the company, it is imperative that he possess the qualifications enumerated.

The airport and concession superintendent has direct charge of such activities as:

The arrival and departure of aircraft. In this he will naturally coöperate with the flight superintendent.

The leasing and operation of hangars and collection of rentals therefrom.

The rental of the landing field to lessees.

Maintenance and repair of airport buildings, equipment and fields, beacons, etc.

Miscellaneous airport concessions such as parking spaces, restaurants, amusement features, hotels, magazine and cigar stands, etc.

The flight superintendent has charge of all airplane flights of every description, with the possible exception of flying-school aircraft. The flight superintendent's duties consist principally of the maintenance of logs showing the arrival and take-off of aircraft for all purposes. Not only is he concerned in the arrival and departure of passenger and air-mail planes but he observes and reports on flights of all other kinds, such as photography service, dusting, seeding, pest spraying, advertising, timber cruising and mapping, forest patrol, sightseeing, etc.

His reports form the basis for ascertaining the flying hours of planes to determine overhaul and repairs, to determine the pay of pilots and co-pilots (emergency pilots), and to provide rather voluminous statistical information required in governmental regulation and for general improvement of the industry. Naturally another phase of his duties is a knowledge of the location of the planes at all times, an activity similar to that of the train despatcher in railroad transportation. He must also have in-

formation, revised daily, showing the hours flown by all planes so that the exact moment of overhaul may not be overlooked. This period of hours flown between general overhaul dates will of course be determined by the company's experience and policy as to safety. It will probably be regulated by governmental supervision following the development of the industry. At present, from two hundred and fifty to six hundred flying hours sometimes elapse between overhauls, depending upon conditions, type of aircraft, kind of service, etc., so it can readily be seen that no exact standards have been definitely established.

The repair-shop superintendent is concerned primarily with the repair and overhaul of planes and motors in service. His other activities include the repair and overhaul of planes in private service. Complete reports of material and labor used daily must be recorded on appropriate work or job orders, the labor must be "tied in" with the payrolls and the materials with requisitions on stores. Orders on repair work for which charges are to be made to outsiders must contain complete data for billing. Shop machines and equipment must also be kept in repair.

A general supervision must be maintained of the expectancy of arrival of planes for overhaul and the date of completion of those being overhauled. The superintendent of this department must be vitally interested in the accuracy and thoroughness of the tests and observations made on planes and motors. The work done in the testing block and assembly rooms, in the opinion of experts, is the most vital in assuring safety in air transportation. Unfailing vigilance in this department provides the pilot with craft which he can rely upon in all emergencies.

In the case of transcontinental air companies, there may be repair shops at intermediate points as well as at the principal airports. Where this condition prevails it is probably best to have all repair shops in charge of one head, so as to maintain uniformity of service and efficiency throughout the system.

The structures and ways superintendent's duties for the most part are the purchase and leasing of landing fields and airports and the construction and purchase of hangars, shops, office and other buildings, as well as the maintenance of all these buildings. The nature of his work will probably require him to be moving from point to point. He must be familiar with the drawing of leases (through the help of the company's attorney). He must know about the proper leveling off and oiling or concreting and laying

out of landing fields and must also work in coöperation with the superintendent of beacons.

The purchase superintendent should work directly under the general manager as a separate department and not directly under the manager of operations. His department is an important one and involves not only the budgeting ahead of requirements by the manager of operations, but also the budgeting of money requirements by the secretary-treasurer's department and, in addition, the general manager's supervision of the financing and requirement provisions. Great care must be exercised to avoid overstocking, while at the same time the stock of needed supplies must not be allowed to fall short of operating requirements.

The purchase superintendent should be in charge of all purchases of every description. Naturally, there should be a perfectly working requisition system.

The radio broadcasting superintendent should be in charge of all information given to pilots and others over the air. In transcontinental systems there are several stations with assistants in charge but these must all work under the head superintendent.

This department is responsible primarily for the transmittal of air messages, almost constantly, to the pilots of mail and passenger aircraft while in flight, or while resting ("sitting down") during flight. These messages tell of fog, wind, temperature, rain and other weather conditions ahead and enable the pilot, by computing his flying time, to know almost the exact time when he would pass through unfavorable air or storm. Upon receipt of adverse storm reports ahead, the responsibility of resuming the flight usually rests with the pilot, as he must know whether he can make certain points in his journey before encountering dangerous areas.

Commercial messages also may be transmitted to passengers during flight, although this has not yet progressed very far.

Maintenance of the radio broadcasting equipment must be thoroughly understood by the superintendent of this department.

The radio broadcasting department also transmits inter-company messages between departments and offices and thus greatly facilitates management, traffic and accounting.

The beacons superintendent is hardly necessary as a separate officer in other than large transcontinental companies. However, in those companies the importance of his department is apparent when it is remembered that there is constant night flying on the

through air lines. This means that a line of powerful, flashing electric searchlights stretches from the Atlantic to the Pacific, along the selected airways, located so that the beams of one are barely lost when those of the next are discerned.

The beacons superintendent must see that his equipment is modern, is maintained in the best of order at all times, and that there are no failures of operation. This involves constant vigilance in maintaining the lights and emergency supplies of parts at various places along the beacon line to insure reaching them without delay in case of breakdowns.

The flying-school superintendent is in charge of all flying-school work. Such schools are usually run by companies organized for that purpose alone. Students are given different classes of instruction, intended to fit them either for private service or commercial passenger service. In the latter case they are licensed by the government. Where it is possible, the courses are paid for in advance. The receipts are carried in a deferred income account and credits are transferred to income as earned through actual flying time of the student.

The flying-school superintendent is responsible for the approval of students' contracts, the reporting of hours of instruction, both ground and flight (which is the basis for determining the amount earned), maintenance of the planes in proper condition and the collection of instruction fees, especially where fees are paid during the course. The latter plan is not nearly so satisfactory as payment in advance, and it is being discontinued rapidly.

The general traffic agent should be in complete control of all general traffic, i. e., the booking and routing of passengers, mail and freight, and special chartered flights. He is concerned with the arrival and departure of aircraft and is constantly looking ahead to the securing of passenger and freight traffic so that the planes may be filled to capacity. Naturally, the comfort and security of passengers require constant attention.

His further duties consist of control over the sale of passenger tickets and freight service and the reporting on quantity of mail carried. In general the work of which he has charge falls into two divisions, namely, (1) the company's own ticket or traffic agencies, and (2) traffic originating in other air-line companies, usually designated as "Interline."

As passenger tickets are sold for cash, it is obvious that the company selling the through ticket over connecting lines receives

all the money and owes the connecting or "interline" company a portion of it. The company will probably have amounts due it from other originating lines and at the same time may owe other lines for portions of its ticket sales.

As there are numerous ticket offices, over a transcontinental line, the general traffic agent must be prepared to exercise constant supervision over ticket sales and should approve all ticket sales and freight service reports transmitted to the general manager. This, of course, includes reports of interline ticket sales.

Reports also must be submitted covering the expenses of ticket offices and waiting rooms maintained by the company. Some agents furnish quarters and expenses and retain a commission for their services.

The secretary-treasurer, in his position as the head of accounting activities occupies a position of importance. Reports of all productive operations must pass through his department and be properly recorded. The financial statements showing the company's net worth and results of operations are the most important, but there are many statistical reports, as well as departmental costs, to be compiled and presented, especially under governmental supervision.

The secretary-treasurer must necessarily be a thoroughly well-trained accountant, preferably a public accountant of experience.

The secretary-treasurer assists in the financing of loans and has charge of the minute books capital stock records and other corporate records. He must also possess executive ability as his department will have many subdivisions and require a considerable force of accountants and clerks.

A secretary must be assigned to assist the secretary-treasurer. All incoming mail and reports must be distributed to the proper sub-divisions. The secretary must have in mind a perfect picture of the activities of the various sub-divisions under the secretary-treasurer and be able instantly to furnish data and reports of each section.

The chief accountant is the right hand man of the secretary-treasurer and is responsible for the several further sub-divisions of accounting activities outlined in chart 1.

The general books may be maintained by the chief accountant, or by his assistant, depending greatly on the size of the organization. The work of this department is similar to that of the

ordinary trading or manufacturing company, with the exception that departmental operation costs are carried further. The subsidiary books are in general any ledgers maintained to record detailed accounts with debtors and creditors and sub-departments which are each controlled by accounts in the general ledger.

The general report department attends to the compilation, distribution and filing of the complete financial and statistical reports that are to be issued periodically. This entails coöperation with the field report and statistical departments.

The field report department is the receiving or assembly place for all reports from operating departments of the entire organization. Naturally, in smaller companies this department may be omitted as the field reports will go direct to the several departments.

The stores accounting department is the department which receives reports of materials and supplies taken from the company's various stores over the transcontinental route.

The filing department should be under the control of one person. Careful study must be given to simplicity of the filing system, as well as adequacy for expansion as years go by and the records accumulate.

The bulletin printing department has charge of the maintenance and operation of the mechanical apparatus such as multigraphs, mimeographs, and other printing machines used for printing the various communications to employees and to the public. These bulletins are of many kinds such as, notices of changes in arrival and departure of aircraft, changes of policy and procedure in departments, price tariffs and changes, bulletins to the public for distribution at airports and on aircraft, forms for company use, copies of reports, sundry instructions, etc.

The statistical department is kept busy gathering and compiling data in addition to the general financial and accounting reports. Such information as hours flown, passengers carried, passenger miles, pounds carried (mail and freight), fuel used, special flights, forced landings, employees' service and compensation, casualties and damages, etc., engage the attention of this department. The information used is incorporated in monthly and yearly reports to the United States post-office department for mail contract service and in sundry statistical reports compiled for the company's use. Incidentally, the reports to the United States post-office department now require that much of this information

be divided as between single-motor, twin-motor, tri-motor and four-motor planes.

The internal audit department is intended principally for accounting supervision of departments outside the general office. It requires the services of one or more traveling auditors. A more or less constant check should be maintained of stores, depots, ticket offices, repair shops, airport offices, etc., and as these are, in the case of transcontinental lines, scattered over the land, an itinerary should be arranged that will cover the several points throughout the year.

This department should be directly under the control of the secretary-treasurer, and the information compiled should be regarded as of a confidential nature intended only for the secretary-treasurer and such departments as he may designate.

SPECIAL ACCOUNTING FEATURES PECULIAR TO THE INDUSTRY

Depreciation, obsolescence and amortization. Depreciation and obsolescence are closely allied in considering the life of aircraft. There are rapid improvements in types of planes and engines, all tending to improve service and particularly to insure safety. For this reason provision for depreciation and obsolescence on aircraft must be considered concurrently and reflected in the rates applied against the assets.

A few years ago when the present air-mindedness was getting under way the ordinary method of yearly rates was used to provide for depreciation on planes and engines. It soon became apparent, however, that this method had little relation to the useful life of planes and engines, so some other method was sought which would reflect, more nearly, the wear and tear according to the actual use of the equipment. It was believed that the hours flown by the plane or engine would be the closest measurement of its span of useful life so, for the last three years, depreciation and obsolescence have been charged off on the basis of flying hours.

There is great variation in the flying-hour lives of the different makes and types. The general range is from 1,500 to 3,000 flying hours, although in many individual instances engines and planes may last longer. (Of course, obsolescence has been considered in these flying-hour life ranges.)

Individual equipment and depreciation records are maintained for each engine and each airplane, and a flying-hour life is ap-

portioned to each unit when it is placed in flying commission. Accurate flying records are kept in the flying log-books that accompany each airplane in flight, copies of which, through the flight superintendent, find their way to the depreciation records.

Thus the equipment record shows at any time the cost, estimated flying-hour life, number of hours flown monthly, the depreciation rate per flying hour (determined by dividing cost by total flying-hour life) and the accrued depreciation. In addition, the equipment record should contain information about general overhaul and repairs. This is more particularly described in a later section under "general overhaul of aircraft."

Owing to the few years of accumulated experience available, the lives of planes and engines are not yet well known, but the further experience of the industry will no doubt produce information whereby these data will be definitely fixed.

Amortization in the aviation industry applies particularly to the writing off of buildings erected upon and improvements made on land not owned. Such improvements, besides buildings, may include leveling of landing fields and oiling or paving them, walks, driveways, fences, architects' fees, sewage systems, commissions to real estate brokers, etc. Naturally, the improvements should be written off to operating expenses over the life of the lease, less any salvage or compensation which the terms of the lease may allow.

General overhaul of aircraft. Minor repairs are constantly being made to airplanes and engines and, naturally, supervision is exercised during flight and at each landing. It is obvious, however, that such repairs cover only defects which are apparent to the eye or ear of the inspector. For safety's sake the aircraft must be given a more thorough inspection from time to time. To provide for this feature, the engines of an airplane are usually overhauled oftener than the plane, but the plane is finally brought in and overhauled. The general overhaul is very thorough. As an example, I observed recently the overhauling of three motors taken from one of the tri-motored airplanes of a large western air passenger company. Each motor was taken to the assembly shop and torn apart, even to the smallest nut and washer, the various assemblies being placed in metal compartments to insure against loss or mixing of small parts. The greasy mess was given a gasoline bath, the metal emerging shining clean. Each part was then given caliper, microscopic, tensile and other tests and the defective parts were junked and replaced by new ones. After care-

ful inspection and reassembly, each engine was placed on a block in the testing room and roared away at full flying revolutions for fifteen hours without a stop. After this the engine was torn down and each part cleaned and tested as before. It was then re-assembled and placed on the testing block for another five-hour run and given careful observation as to its performance. If it emerged satisfactorily it was then ready to be placed in the airplane for flying. Incidentally, passenger planes are set out and the engines "idled" for a quarter or half hour before actual take-off. This is partly to warm up the motors, but also to observe before flight any defect which might exist.

Minor repairs are usually charged direct to operating expenses. The cost of general overhaul is so charged in the United States post-office department manual of accounts for carriers by air. It is customary, however, among aviation operators to spread the cost of general overhaul of planes and engines more evenly over the year's operations by charging operating costs to "general overhaul of airplanes and engines" and by crediting an appropriate reserve account. The basis of this monthly charge is a rate applied against the flying hours of plane and engine and is in addition to and distinct from the depreciation provision. There are no well-established rates for this charge. Rates of \$1.50 to \$4.50 an hour have been employed but the operating company's experience in each instance must determine the rates to apply.

Actual overhaul costs are charged against reserve account, but it is advisable that reserve accounts be adjusted at the close of the fiscal year, so that the credit balances will be equal to an amount obtained by multiplying the total flying hours of each plane and engine since last general overhaul by the hourly overhaul rate of each unit. This adjustment tends to throw the major overhaul costs against the proper year's operations.

Insurance. Perhaps no one thing (mail rates are a possible exception) gives commercial aviation companies more concern than the many forms of insurance that must be carried, especially that covering liability for passengers and planes in forced disastrous landings commonly known as "crashes."

Owing to the large number of accidents in earlier years and also because there was a lack of experience from which to obtain data for rates, the insurance companies either refused to write the risks or made rates that were prohibitive. For these reasons it was quite common for aviation companies to "carry their own

insurance"; in other words, a chance was taken on being able to pay the losses as they arose. During the last two years, however, insurance companies have issued policies covering crash and liability insurance, but the rates are still very high compared with those in less hazardous enterprises.

Forms of insurance covering airplanes assumed by fire insurance companies are:

1. Fire insurance:

- (a) Fire while plane is in flight or during take-off or while landing. The amount of damage from fire must be ascertained before the crashed plane burns after it strikes the earth.
- (b) Fire at all times, except while in flight or during take-off or while landing or while aircraft is being transported. As indicated by the title, this is full coverage fire insurance while planes are on the ground or in buildings.
- (c) Fire at all times. This coverage of course includes everything that is excluded in the two preceding forms and could be written by fire insurance companies not specializing in aviation insurance. Crash damage is not included in any of the three forms above. Such losses are covered by accidental damage insurance.

2. Theft, robbery and pilferage:

This covers theft of tools, accessories, etc., from aircraft (except by company's employees) and damages done to planes by thieves.

3. Hurricanes and tornadoes:

This insurance covers damages or loss to aircraft while on the ground, whether in hangars or in the open. Damages to aircraft by hangars falling down during a storm are included. However, damages to unprotected planes in the open during cyclones are not recoverable. Even damages from fire, provided the fire is a direct result of collapse of the hangar, are recoverable under this form of policy. Tornado damages to aircraft while in flight are not covered under this section but are usually included under accidental damage insurance.

4. Accidental damage:

This is what is usually known as "crash insurance" and covers damages to and losses of aircraft by their coming into contact with the earth or any other object in a way

which causes damage. This also includes collision damage while taxiing, taking off or landing.

5. Fire to building and property in buildings:

This does not differ from that covering like insurance in commercial companies.

Forms of insurance assumed by casualty companies:

1. Property damage:

This covers damages by the insured to property of others which may be injured by aircraft falling or otherwise colliding with properties of others. Special forms are written which insure against damage caused by articles or parts dropped from airplanes.

2. Workmen's compensation:

This is insurance against damages arising from injuries to employees and is regulated by the requirements of state laws governing compensation insurance.

3. Personal accident:

This is similar to the general forms of accident insurance policies obtainable for years. It is used by aviation companies principally for pilots, co-pilots, stewards and any other employees whose duties require traveling in aircraft. Passengers, of course, may avail themselves of this form of insurance.

4. Public liability:

Under this form the aviation company is insured against losses arising out of injuries to the general public. This form does not include coverage for damages paid to passengers.

5. Passenger liability:

The aviation company is insured under this form against damages to or loss of life of passengers while they are riding in the plane. However, after passengers have alighted from the plane, even while planes are "sitting down" en route, any damages or injuries sustained are not covered by this form of insurance.

6. Airport liability:

Under this form the aviation company is insured against losses arising from injuries sustained by the general public and prospective passengers, or passengers en route, while they are in airport fields, landing fields,

on tours through repair shops, and in general while on or near the company's property.

Operators that "carry their own insurance" (usually confined to accidental damage or "crash" insurance) generally charge an operating expense account monthly, on an estimated loss basis, and make a contra credit to a "reserve for crash insurance" account. Losses are charged against the reserve account. This plan has the advantage of spreading losses more evenly over the year and of providing a reserve which would not be dissipated through dividend payments, but it does not allow all the losses of a certain year to be charged against the income of that year. The United States post-office department in its manual of accounts for air carriers allows this practice.

Where the operators carry "crash" insurance with insurance companies, the insurance recovery should be credited to the maintenance or repair account which bears the cost of rehabilitating the plane or, in case of destruction, to the net book value (asset book value less depreciation reserve) of the unit destroyed. The resulting net loss or gain should not be regarded as an operating loss or gain but should be included under miscellaneous charges or income.

Some companies carry crash insurance under the co-insurance plan, which involves a composite form of accounting, including miscellaneous losses or gains as well as part charges against the co-insurance reserve account.

As long as earned surplus is left with substantial balances, there seems to be no particular advantage in setting aside reserves for crash insurance by charges against earnings. The charging of all crash losses to operations as they arise would be the more conservative way and would make each year's operations stand on their own feet. However, opinions of operators are certainly not yet unanimous about the handling of crash losses, and the United States government does not order the use of one specific method. Undoubtedly, further experience is required to solve this as well as other problems in aviation accounting.

Compensation of pilots. While the salaries of practically all employees of an aviation company are paid on the same weekly, monthly or daily bases as in a manufacturing or trading business, the compensation paid to pilots is unique. In most companies pilots receive a nominal monthly or yearly salary, termed the "base pay," and in addition they receive compensation covering

either the mileage or hours flown in a period at certain agreed rates.

Accurate records of flying time must be kept. It is customary to have a pilot's salary voucher form, which consists of excerpts from the aircraft log showing date, starting point, destination, hours flown or mileage, rate and total extra pay due the pilot. Expenses also may be included on this form. Naturally, the salary voucher is signed by the pilot and contains also the approval signature of the flight superintendent. It should be dispatched to the field report department by the flight superintendent.

The mileage or hours-flown compensation is usually considerably more than the base pay, sometimes two or three times as much. Obviously, it is quite important that there should be a thorough supervision of the reporting of pilots' pay to avoid padding or other false reports. The services of the internal traveling auditor are helpful here.

Traffic department—revenue and interline traffic participation. All air passenger traffic is reported and accounted for in general through the following forms and procedure:

1. Booking sheet
2. Passenger ticket
3. Daily dispatch report
4. Daily traffic receipt report
5. Pilots' flight report

1. Booking sheet. This originates in the traffic department in advance of the contemplated flight and is comparable with the booking ahead of boat and Pullman passengers. The booking sheet shows the date of flight, route, destination, name of passenger, place where reservation was made, book number, ticket number, airport or landing where passenger is to be picked up and date of departure. The booking sheets provide the means of checking ticket sales and other related reports and also apprise the flight superintendent in advance regarding passenger capacity requirements.

2. Passenger ticket. The larger transport companies use a ticket form which is becoming more or less standard. The ticket shows the point of departure, destination, name and address of passenger, also telephone number, date of making reservation, date of flight, office of issue, ship and price paid for fare. It is

also signed by the passenger. The tickets are usually surrendered upon entering the airplane. Stubs or copies are provided, so that the passenger retains an identification form in addition to his regular ticket, the selling agent retains a stub and one is sent immediately to the secretary-treasurer or chief accountant. The passengers' tickets, when taken up, are also sent in and checked with the stubs.

Where the ticket sold covers flight over air lines of other companies, a special ticket form is provided which shows different lines traversed. A number of transportation companies, pooling their interests to simplify the traffic problem, formed the American Air Transport Association. One of its first meritorious tasks has been the preparation of a uniform ticket embodying a standard contract. It is especially designed to meet the interline or participating conditions.

3. Daily dispatch report. This is merely a daily report showing in summary form the airships arriving at the airport, or departing therefrom, with information regarding the schedule on which the flight is made, the ship number, capacity, total miles flown, actual flying time, route and date.

4. Daily traffic receipt report. This report records the actual sale of tickets and the cash received. In addition to the date and location of reporting office, the report contains such information as ticket form and number, name of purchaser, destination and stopover, total cash received, commission withheld, miscellaneous receipts, excess baggage receipts, etc. In addition, where interline tickets are sold the amounts to be paid other air carriers are shown.

All ticket sales covering flights over the originating company's own air lines should be credited to a deferred-income account. At the same time, all used tickets taken up should be charged to this deferred-income account and the corresponding credit made to passenger-revenue account. The unused balance in the deferred-income account should equal the unused portion of tickets sold and outstanding.

That portion of ticket sales covering flights over coöperating lines should be credited to traffic balances payable and a daily report should be sent to the other lines, notifying them of their portion of the ticket sales. From this information the participating line will charge traffic balances receivable and credit its passenger-revenue account.

5. Pilots' flight report. This is a rather important report and is a daily log of airship and its engines. This report contains information approximately as follows:

Date
Route or division number
Airplane make
Airplane number
Engine numbers (for each motor)

Columns are provided for the following information:

Type of work (space for symbol indicating whether "M"—mail, "P"—passenger, etc.)
Time of departure
Stations
Time of arrival
Ground time
Air time
Miles
Remarks (description of delays, etc.)

Spaces at the bottom of the reports provide for the signatures of the pilot and co-pilot, as well as approval signatures of the flight superintendent, airport superintendents, landing field agents, etc.

Overhead and its distribution. Referring again to the United States post-office department's manual of accounts for carriers by air, it is quite apparent that no apportionment of any overhead is contemplated, in fact, the only "clearing" accounts mentioned are those covering "stores department" and "shop department" expenses.

Instead of this clear and simple system of presentation, some companies apportion the general and administrative division of expenses over the other four groups of expense accounts, apparently in the belief that some advantage is gained by having each operating group of accounts bear part of the general expenses. If this is done, the distribution should be effected by having one credit account in the general and administrative section bear all amounts so transferred to other groups. In other words, the balances in the general and administrative section of accounts should not be disturbed by any credit apportionment entries. If it is desired to transfer the entire general expense each month, then the credit balance in the apportionment account will, at all times, equal the total debit balances in the general and administrative group of accounts.

The stores and shop department clearing accounts are dealt with clearly in the post-office manual and, as their names indicate, are used monthly to record and distribute the expenses of operating these two departments. Naturally, the larger part of these expenses will concern maintenance and transportation costs, though some will be charged to customers, when repairs are made to equipment of outsiders.

Joint participation in terminal rents and expenses. One of the hardest problems now confronting air carriers is apportionment of airport terminal operating expenses and overhead where several companies use the terminal facilities. In general, these facilities are owned as follows:

- By one large commercial air carrier company
- By two or more air carrier companies
- By municipalities
- By terminal companies

Where the terminal airport facilities are owned by municipalities and separate terminal companies, the problem is simplified by the charge of rentals or fees for the several classes of services rendered. The problem should be comparatively simple, as a tariff of rental charges must be evolved that will cover operating expenses, overhead, depreciation and a fair return on the investment. With these expenses known, the next step is to ascertain the volume of business entering and leaving the airport and then to establish bases of charges.

Where the operating company owns the terminal outright, it is in the same position as the municipality or terminal company, in that it must make charges to outsiders for use of facilities, but it differs in this respect: it need only recover part of the cost of operation as it uses the other part.

In those instances (which should be very rare) where two companies jointly own the terminal facilities and exchange the use of these facilities between them, the problem of equable apportionment is certainly complicated. The plan of joint ownership should be discontinued.

The general trend undoubtedly will be toward transferring the airport terminal assets to a separate corporation.

SYSTEM OF ACCOUNTS AND COMMENTS

The system of accounts for carriers by air, prescribed by the United States post-office department in its order approved July 1,

1930, appears to be the most complete and intelligent exposition of accounts suitable for the commercial aviation industry that has been evolved thus far.

As the manual is lengthy, it is not reproduced here, although the condensed balance-sheet and profit-and-loss forms are given below with some modifications designed to present the balance-sheet as a commercial statement rather than in a utility form. It must be borne in mind that the government's chart of accounts is obviously adopted from the interstate commerce commission's system of accounts for railroad transportation companies. While liberties have been taken in rearrangement and in description, the titles and the numbers of the accounts have not been changed. The Roman numerals refer to the government's group numbers:

BALANCE-SHEET ACCOUNTS

<i>Assets</i>	<i>Liabilities</i>
II. Current assets	VIII. Current liabilities
Less reserve for bad debts	
IV. Prepaid expenses	VII. Long-term debt
III. Special funds	VII. Accounts with affiliated companies
I. Accounts with affiliated companies	IX. Deferred income
I. Investments in affiliated companies	X. Reserves
I. Other investments	VI. Capital stock
I. Real property and equipment account:	Less:
I. Land	V. Reacquired and treasury securities
II. Buildings and improvements	XII. Surplus
III. Equipment	
I. Miscellaneous physical property	
Less depreciation reserves	
IV. Deferred charges	

PROFIT-AND-LOSS ACCOUNTS

Operating revenues:
I. Transportation
II. Air service
III. Incidental
Total operating revenues
Operating expenses:
I. Maintenance of fields, structures and equipment
II. Conducting transportation

Air Transportation

III. Traffic and advertising
IV. Miscellaneous operations
V. General and administrative
VI. Undistributed expenses
Total operating expenses
Net operating profit
Non-operating income
Gross income
Deductions from gross income
Net income, before federal income taxes
Provision for federal income taxes
Net income

SURPLUS ACCOUNT

Surplus at beginning of fiscal period
Additions to surplus account
Less deductions from surplus account
Surplus at end of fiscal period

It must be remembered that the classification of accounts given here is, with the exception of a few modifications, that of the United States post-office department and therefore varies to some extent from a classification that might have been prepared by a strictly commercial business. Considering, however, that at least the mail and passenger carrying sections will undoubtedly be under some kind of governmental supervision, it is best to adhere to the government's classification as a basis. There will surely be alterations and improvements in the classification.

FUTURE OF THE INDUSTRY

Probably no one can write intelligently enough of the future of this industry to make interesting reading. The experience is new and limited. It is true that much progress has been made in new designs; planes have been made safer and more commodious; but in point of profit the result is almost disheartening—but not quite. There is a wonderful vista ahead; no matter how hard and costly the effort to overcome present difficulties, the industry is one of the outstanding attainments of our time and its progress to early and greater development is as sure as the course of the stars.

The costs of planes and facilities per person carried are so excessive that no profits are possible until conditions are changed. How will this be done? No one knows at present but this, like other great problems, will be overcome. After more people get

over their fear of the air, there will be many times more planes used and they will be run to capacity. It is quite certain that many more planes can be flown over the larger lines with little increase in terminal cost, radio broadcasting, overland beacon cost, and general office overhead cost.

Will the planes be greatly increased in size? Probably not, as the more adaptable plane for pay loads will remain somewhere about a sixteen or twenty passenger capacity. Will it be possible to produce cheaper planes without endangering safety features? Undoubtedly some reduction in cost can be expected, but even the latest research does not indicate that any material reduction is possible. Storms and adverse winds must be met and there is no indication that these will abate as time passes.

What about freight? Will freight planes be built large enough to compete for the immense tonnage carried by railroads and especially the large assembled objects that are carried on freight trains? Probably not for some time to come, but here is where a revolutionary change may take place soon in American aviation. Slower, heavy-freight planes could be used to transport more valuable compact merchandise now than is being carried, especially if passenger carrying increases and the terminal facilities are used more. Another phase of the business which is expected to have a great increase in the near future is the carrying of freight to parts of the globe now inaccessible by boat or train, e. g., the wildernesses of Brazil, Africa, Australia, and the northern part of Canada. It is well known that these places are thinly populated by civilized man and that they can support a great population. It is reasonable to expect that some of our future great colonizations will be supported by airplane communication.

We Americans are prone to think of ourselves as isolated and self-sufficient; we forget that successful commercial aviation on the continent of Europe has been an accepted thing for years in advance of our air development here. Over there the distances traversed are shorter, hence speed is not so important as with us who have a continent of greater distances. With shorter routes, the European countries have given thought to the operation of heavier, slower planes for carrying freight and have advanced beyond us, especially Germany, where great loads are carried.

In conclusion, future development will probably come through lower costs of planes, increase of safety devices and plans of operations, increase of passenger traffic through further

Air Transportation

education of the people to travel by air, establishment of light beacons to permit uninterrupted night flying, increase of freight service, and establishment of cheaper air transportation routes to inaccessible places where man can set up colonies. Thus far we see at present; but the progress of the next ten years will probably cause this attempt at prophecy to appear very feeble.

Finance Company Systems

BY MORGAN A. CASEY

There appeared in THE JOURNAL OF ACCOUNTANCY for August, 1931, an article by D. Paul Musselman in regard to accounting systems of finance companies, and it evoked considerable interest. The following comments presume to offer constructive, though critical, suggestions based upon experiences somewhat contrary to those of Mr. Musselman.

Mr. Musselman makes the statement that the process of trial and error which tends to establish standards in accounting systems has made little advance in the case of transactions peculiar to finance companies; and he states that while forms have been borrowed and adapted from other kinds of business, they have proved awkward and inefficient when tested by the special demands of the new type of enterprise. Such inadequacies may obtain as to finance companies in general, but it is certain that some of the older and larger companies have developed extremely efficient systems which do make readily available the information necessary for proper management and do facilitate a thorough audit.

INSTALMENT-NOTE LEDGER

Mr. Musselman says that companies dealing in several types of notes may find it advisable to departmentalize them into several groups, each with its separate control and separate subsidiary ledger. This point is of importance. As the volume of business of any particular group increases, further sub-division should be made to prevent the individual subsidiary ledgers from becoming unwieldy in balancing detail with control records. This step of further subdivision is often deferred with a resultant loss of efficiency.

Mr. Musselman says the ledger should be designed for:

- A Facility in finding accounts for posting.
- B Facility in effecting agreement with the control.
- C Infallibility in revealing delinquents.
- D Facility in obtaining data relative to future cash position.

I concur in attaching paramount importance to the first three items enumerated, but some question arises with regard to item D, as to whether the managerial problem of determination of

future cash position is closely related to the requirements of the most efficient form of subsidiary ledger.

I find myself at variance with Mr. Musselman concerning the form of ledger which most nearly satisfies all requirements. A ledger of cards for individual accounts is proposed as more suitable than the Boston ledger described by Mr. Musselman, in which

“The individual accounts are set up horizontally, one account appearing below the other—the vertical columns (in pairs) representing periods of time, any period from a day to a month or more, depending upon how frequently reports are desired by the management.”

The form of the proposed ledger card may be varied to suit local conditions. An illustration of the general form is a card in which there appears in the upper margin the necessary identification of the account, including the serial number assigned to the note, the name and address of the maker and dealer, the date of purchase of the note and any other relevant information; the left side of the card will show the total amount of the paper, together with the amounts of each instalment entered (vertically) opposite the month when due; and the center and right side will have the names of the months listed vertically, with vertical columns also for debit, credit and balance, and adequate provision for references.

Facility in finding accounts for posting. Cards in trays or “tubs” mounted on movable standards permit the finding of individual accounts with less physical exertion than by the handling of bound book ledgers. The cards also have the advantage of greater visibility, since by the use of “tabs” the approximate location of the desired card may be determined by merely scanning the “tabs” without the opening of covers and turning of pages. Orderly arrangement likewise may be obtained in the card system with the same facility as in the Boston ledger, either alphabetically or under some other form of classification, with the decided advantage of ease of elimination of closed accounts from the current record when cards are closed. Mr. Musselman makes the statement: “Where card systems are in use the temptation to remove the accounts is practically irresistible.” I grant that on rare occasions a card may be removed from the file and mislaid, but this defect is practically negligible under competent office management.

Although Mr. Musselman’s point may be admitted that “actual posting is a simple operation in any system,” nevertheless the

mechanical operations of voluminous postings can not be completely ignored. Frequently, conditions are such that "machine" posting is more efficient than "longhand" posting, and, obviously, "machine" posting requires the use of cards or loose-leaf sheets.

Facility in effecting agreement with the control. It is granted that, after the completion of the footings of the current and future due columns and the carrying forward of the delinquent balances, the remaining step necessary in determining whether or not the Boston ledger is in agreement with the control is a relatively simple one. Its superiority over the card system appears to be only that it requires less time to complete than is required to draw off a trial balance of the cards in the regular way. It would seem, however, that neither system has any advantage as to localizing possible errors. It has been my experience that no particular difficulty is encountered in balancing card ledgers, provided that the office routine includes an inviolable rule that all ledgers be balanced during each month. In large organizations this may be facilitated by "staggering" the balancing throughout the month, i. e. drawing off detail trial balances of the various ledgers at different dates and reconciling such trial balances with month-end control balances.

Under the regular routine of the system proposed by Mr. Musselman, the amount of each individual balance is calculated only in the case of delinquent accounts. Mr. Musselman states that "No one wants to know the balance in the individual accounts ninety-nine per cent of the time. . . . Let the interim balances be computed in individual cases where necessary." As computations of individual balances necessitate additional work and are seldom called for, it is quite logical in the case of the Boston ledger that this be done only on delinquent accounts; but, where bookkeeping machines are used the calculation is mechanical, entailing little additional effort on the part of the operator. In the card system the individual balances are available whenever needed for credit purposes, determination of outstandings by dealers, etc., without any delay in computing them.

The functioning of the card system may be described briefly by considering the various types of entries commonly made, as enumerated by Mr. Musselman, viz.:

1. Instalment-note purchases.
2. Collections and charge-backs to dealers.

3. Dishonored cheques and protest fees.
4. Re-writes.
5. Repossessions.
6. Adjustment of bookkeeping errors.

Instalment-note purchases. After the purchase of the paper has been completed, the ledger card may be prepared in one of two ways, both of which have been found to be practical:

(a) A "master billing sheet" is typed on a machine equipped with "ditto" ribbon. From this "master sheet" all needed copies are run off on a "ditto" machine. These copies may include the ledger card, branch record, insurance notice, dealer's notice, purchaser's copy, etc.

(b) An alternative method is that of using "light weight" sets of forms prepared in advance with carbon paper inserted as required so that the forms may be typed in one operation on an ordinary typewriter.

Method (b) makes possible the immediate distribution of the various copies, while method (a), of course, necessitates the second step of the "run-off" on the "ditto" machine. When branch offices are maintained, a workable routine under method (a) is for the branch to type the "master sheet" on "ditto" ribbon and send the "master" to the main office where "ditto" machines are maintained for the preparation of the several copies. A delay may occur before the proper copies are returned to branches some distance from the home office. If this delay proves detrimental to efficiency the second method (b) is preferable, as the complete set is typed at the branch, where proper copies may be available immediately. The organization structure of a given company will determine the best method of preparing the billing sheets.

Under either method the amount of the original debit is the total amount to be collected, with the amounts of the instalments shown in memorandum form as previously described.

Collections and "charge-backs" to dealers. Little comment is considered necessary with regard to collections, as the posting operation is simply a matter of appropriately recording the cash received. In large companies posting media, consisting of individual slips of paper for recording collections as received, are used to advantage. The specific details naturally vary with the type of cash records employed. "Charge-backs" to dealers offer no particular problem, as the entry is merely a credit to notes

receivable and a charge against the dealer's account (the latter ordinarily reflecting a credit balance because of "hold-backs").

Dishonored cheques and protest fees may be disposed of with the simple statement that they are charged against the notes-receivable account and are posted in the debit column of the ledger card with appropriate symbols or abbreviations indicating the nature of the items.

"Re-writes." If the commodity financed is income-producing, such as industrial machinery, occasions may arise where the original contract may have been written over too short a period and an extension of time may be granted to the maker of the note; but such an extension appears to be seldom granted in respect of non-income producing commodities, such as automobiles of the pleasure class, with the single exception of commodities financed on the "wholesale" plan, i. e. advances to dealers on commodities purchased from manufacturers or distributors. This exception appears reasonable, when it is considered that the commodity securing the advance is still unused and its value unimpaired, save only by the passage of time. (Of course, if repeated renewals are granted the commodity may become obsolete and its value as security may be impaired.)

When such an extension or renewal is granted a new contract is drawn and new set-up made in the notes receivable, with suitable notations in the receivable records so that the extension is not lost sight of in credit problems and consideration of reserve requirements. Whenever renewals or extensions are made, such new paper should never be included in the new business volume, and its elimination must be carefully watched.

Repossessions. I agree with Mr. Musselman that repossessions should be regarded in the first instance as a change in the legal status of the account, rather than as an accounting transaction, and that a memorandum of the occurrence should be entered in the detail account without further entries until the disposition of the collateral. Of course, the management should be informed currently of the condition of such accounts. However, it must not be lost sight of that this procedure of allowing the "repossessed" accounts to remain in the regular notes receivable is only a labor-saving expedient in order to eliminate numerous entries to the detail ledgers. Whenever a balance-sheet is prepared, cognizance must be taken of the "repossessions" included in notes receivable. It may be most practical to omit any ad-

justment for monthly statements prepared for management use only, as the executives, aware of the condition, will not be misled; but any balance-sheet which may reach outsiders or stockholders should give effect to the segregation of repossessed commodities stated at no more than realizable depreciated values. The adjustment for balance-sheet purposes may be made to control accounts only and reversed at the beginning of the succeeding period, thus eliminating the numerous entries to detail records.

There appears to be no real objection to so segregating only accounts discounted with dealers "without recourse" and with dealers of questionable financial standing. If this procedure is followed, "repossessions" of accounts with good dealers, against whom the finance company may have recourse, will be included in the notes receivable in the balance-sheet. The extent of such a condition should be stated in a footnote or accompanying comments.

Adjustment of bookkeeping errors. No difficulty is encountered in this respect in the card system.

Infallibility in revealing delinquents. It is evident that after the delinquent accounts are carried forward in the Boston ledger, a list of such accounts may be transcribed therefrom more readily than from the card ledger, but the advantage does not seem to be material in view of other disadvantageous features of the Boston ledger. Considerable doubt arises in my mind as to the efficacy of a record which contains two columns for each month or period when an instalment falls due (i. e. possibly forty or more money columns) the postings in which are to be made in several different colored inks.

Facility in obtaining data relating to future cash position. Earlier in these comments the statement was made that I did not concur with Mr. Musselman in the opinion that the managerial problem of future cash position was very closely related to the requirements of the most efficient form of subsidiary ledger. The Boston ledger, of course, does make available the "spread" of the paper by maturities. This, however, is only part of the information necessary, as future cash outlay will fluctuate with the volume and other indeterminate factors, and it seems that predictions of future cash position are little better than good guesses as to what may happen. In some cases where bankers' acceptances or "gold notes" are issued as a method of borrowing, it may be necessary to "spread" the paper by maturities. This

is done in some organizations by use of a sorting machine; in some companies the information may be developed in a separate statistical record. It is beyond the scope of these comments to discuss further the various factors involved in attempting to predict future cash position, but, in any event, I am of the opinion that it is impracticable to maintain the detail ledger in a form which makes directly available the "spread" of maturities.

Before leaving the subject of the instalment-note ledger, it may be stated that the specific details of the card system are subject to almost infinite variation. The form of the ledger sheet suitable for indirect collection paper is materially different from that outlined, but a detailed description of such a ledger is omitted for the sake of brevity.

Finally, mention is made of a modification of the card system under which bookkeeping machines are not used for posting. The ledger cards or sheets are prepared with a column reflecting the predetermined balance after each collection (assuming that the payments are made in accordance with the terms of the contract) and as collections are made the posting includes the recording of the cash received and the striking out of the former predetermined balance. To cover those instances where payment is made for an amount other than the instalment required by contract, a "short" column is provided on the ledger sheet in which is recorded the difference between the predetermined and the actual balance. In drawing off the trial balance of such accounts the amounts in the "short" and regular balance columns are appropriately combined. It would seem that the system here briefly outlined would be more suitable under conditions where most of the collections are for the exact amount of the instalment per contract, and would be less suitable where the class of paper discounted is such that collections for irregular amounts are comparatively frequent.

INSTALMENT-NOTE REGISTER

It is granted that entries of notes purchased should be recorded chronologically, but I do not agree with Mr. Musselman that such entries should be divorced from the cash records. On the contrary, a very satisfactory form of record is one which combines the functions of a cash disbursement book and the instalment register as outlined by Mr. Musselman. Such a record

would have the columns which he describes as suitable for the note register. The principal columns follow:

1. Dr. Instalment notes receivable,
2. Cr. Dealer's equity,
3. Cr. Unearned finance charges,
4. Cr. Insurance payable on collateral,
5. Cr. Dealer's surcharge,
6. Cr. Due in settlement;

and, in addition, would include the customary reference and explanatory columns for cheque number, etc., as in the common form of cashbook. In this record the column "due in settlement" would be the cash column for the amount of cash disbursed. A particular bank account (or accounts) should be used only for purchases of paper, and the record described above would then constitute the cash disbursements book for such cash accounts as well as a complete record of paper purchased. (A separate bank account should be maintained for miscellaneous disbursements, salaries and other incidental expenses, which may be recorded in a separate cashbook of the type commonly used.) Paper will be purchased rarely by a finance company without an outlay of cash, but an additional column or two may be included in the record for handling these infrequent transactions. The posting from the principal columns of this record would be the same as that described by Mr. Musselman, with the single exception that the column in his system, "due in settlement," is posted, under the system proposed here, as a credit to cash for the disbursements made for purchase of paper.

Possible variations and modifications of the note register will not be discussed further, but the following comments are made in reference to Mr. Musselman's description of the principal functions of the record:

If a suspense or temporary clearing account is used, special care should be exercised to prevent this account from becoming a convenient catch-all for small differences and adjustments. My personal experience includes an examination of a set of books where such a clearance or suspense account was used, in which there had been allowed to accumulate over a period of years minor differences in foreign exchange collections, adjustments of service charges, etc. This, of course, was an extreme case but, none the less, illustrates an important point. The regular routine of the office should include a periodic analysis of the items comprising

the balance in the suspense account, and items not cleared from the account within a reasonable time should be investigated and proper disposition made of them.

I agree with Mr. Musselman that the holdback from dealers should be treated on the balance-sheet as a deduction from notes receivable rather than stated on the liability side. There is little defense for the latter procedure.

CASH RECORDS

I am in entire agreement with Mr. Musselman in the point made that petty cash, or funds in the hands of agents or branches, should be handled by the imprest system. As to the form of cashbook, however, a segregation of the records of receipts and disbursements is proposed rather than the combined record suggested by Mr. Musselman. Comments were made on the disbursements records in the discussion of the instalment-note register under which the proposed record serves as a cash-disbursements record for purchase of paper and as a note register. The record of receipts presents no unusual problems. Suffice it to say that the records should be such as to facilitate posting to the subsidiary notes receivable ledgers; to aid recapitulation by the same classification maintained in the departmentalizing of the notes receivable, and to facilitate bank reconciliations.

A routine of daily deposits of all receipts is a primary requisite of a system which adequately controls the handling of cash. It would appear from Mr. Musselman's pro forma "cashier's daily settlement" sheet that disbursements are made direct from receipts, since the form reflects cash expenditures and fund reimbursements as a deduction from cash on hand before determination of the amount to be deposited. Such a practice is strongly to be condemned. Receipts should be deposited intact and disbursements made by cheque, except for minor items from petty cash.

A daily statement of cash in banks should be prepared, the form of which may vary with the particular conditions existing. Such statements generally consist of a list of the banks, with the following information shown in more or less detail:

Balance at close of previous day.
Withdrawals.
Deposits.
Closing balance.

DISTRIBUTION OF UNEARNED FINANCE CHARGES

Although the method of distribution of unearned finance charges proposed by Mr. Musselman has the advantage of simplicity, I am of the opinion that the results obtained would not be sufficiently accurate to justify its recommendation. Mr. Musselman states that he identifies the service charge and interest as one item and proposes to distribute the total in equal amounts for each period over the average life of the paper. The rather obvious fault in such a procedure is that no cognizance is taken of the fact that the uncollected balance of the paper (which is certainly at least one of the factors controlling the proper distribution) is much larger during the earlier periods of the series than during the later periods. To illustrate this point it is only necessary to mention that in the case of paper written for twelve months, the amount outstanding (i. e., the principal of the company's funds invested) is twelve times as great during the first month as in the final month, and yet the amount of income originally deferred, but subsequently taken into earnings, is the same in the first month as in the last.

Mr. Musselman states that it may be contended that the service charge had been fully earned when the note was purchased; or it may be urged with equal force that the profit is not realized until the transaction is completed. He, of course, does not recommend either of these extremes but chooses rather what appears to be an arbitrary middle course, the chief defense of which is its simplicity and conservatism.

In the last analysis a finance company makes profits by lending its money. Is it not logical, then, that the rate of return of such funds (thus made available for other enterprises) should be the controlling factor in determining when the income has been earned? The method referred to may be illustrated by reference to an instalment note written for twelve months. The multiples outstanding from the first to the final month are: 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1, aggregating 78. At the end of the first month $12/78$ of the total service charge is taken into income; $11/78$ at the end of the second month; etc.

Mr. Musselman justly criticizes the method of estimating the periodic profit by the application of a flat percentage of the balance in the deferred-income account, for the reason that such a basis does not fluctuate in proportion to the maturities. The

"declining investment" method described above does give effect to fluctuations in volume and changes in rates.

Finance companies frequently follow the practice of considering a portion of the service charge as earned immediately upon purchase of the paper, on the premise that expenses have been incurred in the acquisition of the paper and that, accordingly, it is proper to offset such expenses by absorbing a portion of the service charge into earnings immediately. There seems to be no real objection to this practice, provided that the proportion of service charge thus included in earnings is a reasonable one. If this procedure be followed, the brief description of the method of deferring income outlined in the preceding paragraphs should be supplemented by pointing out that the given portion of service charge, say 15 per cent., is first determined and recorded as earned income, and the balance, say 85 per cent., is then spread on the basis of 12/78, 11/78, etc.

The "declining investment" method is not generally applicable to "wholesale" paper, since this type of paper is not generally in the form of instalment-notes but is drawn in the form of time drafts, with the total amount payable at maturity. Briefly, a method may be employed for distributing the service charge on wholesale paper under which the earned element for each period is determined to be the sum of two amounts calculated by the application of flat percentages on (1) outstandings and (2) the volume of new business.

In concluding the remarks on deferring of income, mention is made that in the case of companies which have been operating long enough to develop representative experience, it has been found unnecessary to spread the income separately on each note or block of paper on the multiple basis of 12/78, 11/78, etc. Instead the total service charge may be spread on the basis of percentages developed from past experience. For practical purposes the degree of error resulting from this method is relatively small and unimportant, save when the average length of the paper changes appreciably. At such times the percentages must be appropriately revised.

FINANCIAL STATEMENTS AND RATIOS

Mr. Musselman's comments on the balance-sheet are commendable. However, his statement that a reserve for losses is a desirable procedure should be more positive. It is imperative

that a reserve for losses be provided if the balance-sheet is to show the true financial condition.

In closing, casual mention is made of an error in terminology in Mr. Musselman's comments on "Future cash position." The following is quoted from the article:

"The future period may include one or more accounting periods, but it should be an established period which will give its management sufficient time to make such arrangements as may be necessary to take care of the company's own obligations. The probable income will be determined from the trial balance of the subsidiary instalment-note ledger . . ."

The phrase "the probable income" should be "the probable cash receipts." Income and cash receipts are not synonymous terms.

The South Sea Bubble and Mr. Snell

By C. J. HASSON

"O Companies, Companies, ye Bane of Honesty, and Ruin of Trade! but the Market of Jobbers, the Harvest of Managers, and the Tools of Knaves and Traytors!" *London Journal*, circa 1721.

Samuel Pepys, whose accounting career was discussed in this magazine some months ago, died in 1703. The South Sea Company was organized eight years later. And nine years after that, in 1720, England experienced its first great period of stock speculation. South Sea stock led all the others, and investors in that company suffered most when the crash came. Millions of pounds were lost. A parliamentary investigation resulted in the confiscation of property of many who had acted in bad faith. Charles Snell, a writing master and accountant, made a special audit and his report was published. It is interesting because it is perhaps the oldest English audit report of its kind.

After the bursting of the South Sea Bubble, as the crash was called, the South Sea Company continued in a modest way for some hundred and thirty years. Its most famous employee, perhaps, was Charles Lamb. Beginning in 1791, he worked in its offices several years. His experiences there formed the basis for the first of the famous *Essays of Elia*. In it he tells of the layers of dust covering the old ledgers and day-books "that seldom used to be disturbed, save by some curious finger, now and then, inquisitive to explore the mode of bookkeeping in Queen Anne's reign, or, with less hallowed curiosity, seeking to unveil some of the mysteries of that tremendous HOAX, whose extent the petty speculators of our day look back upon with the same expression of incredulous admiration and hopeless ambition of rivalry as would become the puny face of modern conspiracy contemplating the Titan size of Vaux's superhuman plot. . . .

"With what reverence have I paced thy great bare rooms and courts at eventide! They spoke of the past—the shade of some dead accountant, with visionary pen in ear, would flit by me, stiff as in life. . . . But thy great dead tomes, which scarce three degenerate clerks of the present day could lift from their enshrining shelves, with their old fantastic flourishes and decorative rubric interlacings; their sums in triple columniations, set down with

formal superfluity of ciphers; with pious sentences at the beginning, without which our religious ancestors never ventured to open a book of business or bill of lading; the costly vellum covers of some of them almost persuading us that we are got into some better library, are very agreeable and edifying spectacles. . . ."

Another famous employee was Adam Anderson. He began work for the company a year after the crash and continued for forty years. He will be remembered for his monumental work, *An Historical and Chronological Deduction of the Origin of Commerce from the Earliest Accounts*. This labor absorbed most of his spare time for many years, and was completed a year before he died. Incidentally, he owned a copy of James Peele's *The Pathe ways to Perfectness, in th' accomptes of Debitour, and Creditour* . . . published in 1569.

In all probability, the South Sea Company was organized primarily to convert the large floating debt of the state into a funded debt. The secondary object was to organize a corporation to develop foreign trade. For that reason it was called "The Governor and Company of the merchants of Great Britain, trading to the South Seas and other parts of America and for Encouragement of the fishing." It was to take over about ten million pounds sterling of unfunded debt which at the time was worth around 70 per cent. of par. Holders of the unfunded debt could convert it into South Sea Company stock at par. As the state would pay the interest on the debt to the company, those who converted would receive that, together with what profits the company made by trading. Actual conversions, unpaid interest and other obligations brought the capital of the company to £10,000,000. In 1711, trading possibilities with South America held much promise. Peace with Spain was approaching certainty, and with it the English hoped would come permission to supply the Americas with slaves.

It was not until the middle of 1713 that Queen Anne was able to inform the directors of the company that England might now trade in negroes with South America. Bonds to the extent of £200,000 were immediately issued to provide working capital. A setback occurred when it was discovered that the Spanish king was to receive one fourth of the profits, and that Queen Anne was to receive a like amount. But in March of the following year the company accepted the plan and the queen assigned to it her share in future profits.

For the next few years the company was active mainly in establishing trading posts and equipping a few ships. Profits were negligible. Then in 1718 war broke out again between Spain and England, and all property in Spanish-American ports belonging to the South Sea Company was seized. The loss was estimated at £200,000. Trading, of course, was ended.

The following year the company proposed to take over the lottery loan of 1710. This loan had amounted to £1,500,000 and was in effect the purchase of an annuity which was to consist of a series of yearly payments of £135,000 each for a period of 32 years. In 1719 there were still $23\frac{3}{4}$ payments to be made. The company proposed that annuitants exchange their annuities for stock at the rate of eleven and one half years' purchase of the yearly payment. The exchange was to be at market, which at the time of conversion was 114. The state was to receive an additional loan also, the amount to be based on the percentage of annuities converted. About two-thirds of the annuitants agreed to the plan. The stock given them in exchange for their annuities, plus the stock sold to the public to provide cash to lend the government, brought the capital of the company to around $11\frac{3}{4}$ millions.

In November of the same year the company proposed that it take over the entire debt of the state not assigned to other companies, which amounted to about £30,000,000. Besides accepting only a small rate of interest, it agreed to pay the state a bonus of £3,000,000. Later this was raised to £7,750,000. The conversion was to be at market but the increased capitalization was to be at par. The excess shares might be sold to the public.

Before stock was exchanged for government debt, the company sold for cash the surplus stock which would result if and when debt conversions were made at a premium. The first sale was made in April, 1720, when £2,000,000 was offered at 300, to be paid in instalments. A little later, £1,000,000 was offered at 400. Sales in each case ran over the quota, so that a total of $3\frac{3}{4}$ millions was sold, which would bring the company $12\frac{3}{4}$ millions when fully paid.

Although this was contrary to orders from parliament, apparently no objections were made. The procedure was necessary because bribes had to be paid members of parliament who had sponsored the transfer of the national debt to the South Sea Company. These bribes totaled well over $1\frac{3}{4}$ millions.

When offers were made to the public to exchange the irredeemable and redeemable securities held by them, the price ranged from 146½ for the first offer to 763. There was an interval of several months between the first and last offers, and during this time the stock rose rapidly, at one time reaching 1,050.

As was proven later, the directors were responsible for the rapid rise. They lent 50 per cent. of market when the stock sold at 400; and also made loans on stock for which only part payment had been received. They sold stock to the public asking for 10 per cent., the balance to be paid, in the case of one issue, over a period of five years. They circulated rumors of great possible profits in the south seas and also a rumor that a 60 per cent. dividend would be paid at Christmas.

Looked at today, knowing most of the facts as we do, it seems strange that people would have acted so madly. Here was a company which, until 1720, had never paid over 6 per cent. It had made a little profit in trading but that source had been cut off by war. However, we see a complete picture. In 1720, half was withheld entirely, and the other half was painted in most gaudy colors.

Besides, a series of uncertain forces, all of which have not been identified even today, cumulated into producing a psychological effect on the mass mind which at some future time will no doubt be recognized as akin to the psychology of the mass mind in 1929.

For it was not only South Sea stock that was purchased blindly. Hundreds of new ventures appeared, all with capitals of £1,000,-000 or more. Par value of many of the shares was £1,000. Initial payments were as low as one-eighth of one per cent. Most of the new companies were to make tremendous profits doing unheard of things. Here are some examples:

- "To make deal boards out of saw-dust;
- "To grow mulberry trees in Chelsea Park so that silk-worms might be cultivated;
- "To furnish funerals to any part of Great Britain;
- "For extracting silver from lead;
- "For encouraging the breed of horses in England, and improving of glebe and church lands, and repairing parsonage and vicarage houses."

Certainly the last named company was inclusive in its scope.

Smollet, in his *History of England* writes as follows: "The nation was so intoxicated with the spirit of adventure, that people

became a prey to the grossest delusion. An obscure projector, pretending to have formed a very advantageous scheme, which, however, he would not explain, published proposals for a subscription, in which he promised, that in one month the particulars of his project should be disclosed. In the meantime he declared that every person paying two guineas should be entitled to a subscription for one hundred pounds, which would produce that sum yearly. In one forenoon this adventurer received a thousand of these subscriptions; and in the evening set out for another kingdom."

Poor and rich alike talked of little else but the paper profits they were making, and used every penny to purchase stock. A contemporary play contains these lines:

"Yet 't is a Farce, and by Stock-jobbers plaid,
Shopkeepers mourn, no Debts are to be paid;
Garters and Lords of Rank won't pay their Dues;
They can't be trusted for a Pair of Shoes;
If Dun crys out—my Lord, I shall be broke;
No help, crys he, my money's all i' th' stock;
I've scarce enough at this next Bubble-meeting
To pay my Friends, the Brokers, for their Sweating."

Alexander Pope invested £500 when the price was around 180. He wrote to a friend:

"The question you ask about the fair ladies' gains and my own is not easily answered. There is no gain till the Stock is sold, which neither theirs nor mine is. So that instead of wallowing in money, we never wanted more for the uses of life, which is a pretty general case with most of the adventurers, each having put all the ready money they had into the Stock, and our estate is an imaginary one only. . . ."

As the market began to tremble before the fall, the directors made a last effort at stabilization. It was apparent that there was not enough money in the country to meet instalments as they came due or to buy the stock as it was thrown on the market. This shortage was due in part to the great sums taken by the South Sea Company itself and in part to the sums taken by the other ventures. Most of these operated without a charter or with a charter from an old company, often one which did not permit the new kind of business. The South Sea Company, through its purchased influence in parliament, asked that these companies be investigated, and that any without charters, or with inadequate ones, be prevented from selling stock.

As parliament began its investigation, many holding stock in the new companies were afraid that they would lose all, and so sold. This caused stock prices to fall, which in turn caught the speculators who had bought on margin. They sold South Sea stock in order to cover, and this multiplied by many instances started the crash. It would have happened sooner or later, for after all it was a speculative frenzy. A bubble is too delicate to last.

As soon as South Sea stock fell to 600, private bankers sold out, for that was the highest price at which they had made loans. The stock fell more rapidly, and limits at which earlier loans were made were reached. During the course of a single month, from August 25th to September 28th, the stock fell from 900 to 190.

The crash produced the greatest consternation in England. Everyone had purchased stock of one company or another, and almost everyone had lost. Businesses and persons failed wholesale.

Pope wrote to a friend: "Most people thought the time would come, but no man prepared for it: no man considered it would come like a thief in the night; exactly as it happens in the case of our birth. Methinks God has punished the avaricious, as he often punishes sinners in their own way, in the very sin itself; the thirst of gain was their crime: that thirst continued became their punishment and ruin. As for those few who have the good fortune to remain with half of what they imagined they had (among whom is your humble servant), I would have them sensible of their felicity and convinced of the truth of old Hesiod's maxim, who after half his estate was swallowed up by the directors of those days, resolved that half to be more than the whole."

He refers again to his loss in these lines: "The vast inundation of the South Sea has drowned all, except a few unrighteous men, contrary to the deluge, and it is some comfort to me I am not one of those, even in my afflictions."

Samuel Johnson, in his *Lives of the Poets*, wrote of John Gay, author of the *Beggar's Opera*: "Gay in that disastrous year [1720] had a present from young Craggs of some South-sea stock, and once supposed himself to be master of twenty thousand pounds. His friends persuaded him to sell his share; but he dreamed of dignity and splendour, and could not bear to obstruct his own fortune. He was then importuned to sell as much as would purchase an hundred a year for life, 'which,' says Fenton,

'will make you sure of a clean shirt and a shoulder of mutton every day.' This counsel was rejected: the profit and principal were lost, and Gay sunk under the calamity so low that his life became in danger."

Matthew Prior, also a poet, wrote to Lord Hartley, ". . . everything was in such confusion, as to the pecuniaries in Change Alley and South Sea, that I did not know what to say; but the confusion still remains, and I must be longer silent—I find—if I stay till I know what to write on that subject: all is floating, all falling, the directors are cursed, the top adventurers broke, four goldsmiths walked off, Walpole and Townshend sent for, that they may settle matters; . . . and every man with a face as long as Godolphin's . . ."

He also lost, but not a great deal.

Of course, foul play was suspected. Many of the directors of the South Sea Company had become very wealthy during the year or two preceding the break and had flaunted their wealth besides. Grigsby, an accountant for the company, had declared that his horses would feed on gold.

Public agitation demanded an investigation, which got under way in December. A secret committee was appointed to investigate, and it had power to call for books and papers. It soon produced a story which, despite mutilated and missing records and a general confusion, caused the confiscation of many estates and the sending of a few to the Tower.

In the preface to its report, the committee on secrecy declared: "In the Progress of their Inquiry, your Committee found it attended with many Difficulties: In some of the Books produced before them, false and fictitious Entries were made; in others, Entries with Blanks; in others, Entries with Rasures and Alterations, and in others, Leaves were torn out: They found further, that some Books had been destroyed, and others taken away, or secreted; Nevertheless your Committee are enabled to lay some Matters of Importance before the House for their present consideration."

A chief witness unfortunately escaped to the continent. He was Mr. Knight, treasurer and accountant for the company. The committee was able to prove that he and four directors had paid out as bribes to members of parliament at least £1,259,325.

The method followed in the payment of bribes is interesting. Sales of company stock to members of parliament and others

were recorded in a special book. No cash was received and no stock was delivered. After the stock had reached a higher price it was sold again in the open market. The difference between the purchase price and the sales price was paid to the person to be bribed. It was found that one hundred twenty-two lords and four hundred and sixty-two members of the house of commons had subscribed to a total of £3,000,000. Few of these subscriptions had been bona fide.

One of the most sensational trials resulting from the testimony submitted by the secret committee was that of Charles Stanhope. From May to September, 1720, £51,736 had been paid him by the South Sea Company. Also, £50,000 of stock had been transferred to Turner & Co., a banking firm, in March, 1720. In May it was paid for by Turner & Co. and in June they began selling it through brokers. A price of £125,000 was paid for the stock; it sold for a total of £375,000, leaving a £250,000 profit. This profit was paid to Stanhope in December, 1720. The name "Stanhope" had been altered to read "Stangape" on most of the books of account of Turner & Co., but no change had been made in the indexes to the several ledgers. Mr. Sawbridge, a partner, acknowledged that the name had been altered at his direction after the house of commons had commenced its investigation.

Charles Stanhope's defense was faulty as well it might be, but even so he escaped conviction, the vote being 180 to 177.

The obvious injustice of this caused those who had lost heavily to be very indignant. A clamor was raised that echoed loudly in parliament. So loudly did it echo, in fact, that parliament was unduly severe on the others implicated in the same case. These were Sir George Caswell, Elias Turner and Jacob Sawbridge, all of the firm of Turner & Co. Caswell and Sawbridge were also members of parliament, and Sawbridge was a director of the South Sea Company. Their estates were confiscated and Caswell was imprisoned in the Tower.

Turner & Co. apparently retained Charles Snell as accountant in defense. His report, which was published, is the oldest one of its kind discovered to date. But even without this distinction he would still be remembered, for he wrote a bookkeeping text completely in verse, surely something to set him apart from the rest of mankind.

Charles Snell was born in 1670. He attended Christ's hospital, which was also Charles Lamb's school, and was later apprenticed

to a writing-master. In the seventeenth century most writing-masters also taught accounts, and a few got what assignments they could in the way of public accounting. Most of these were special investigations.

Besides at least four texts on writing, Charles Snell published the following on bookkeeping:

The tradesman's director; or a short and easy method of keeping his books of accounts. 1697.

An examination for young accomptants. n.d.

Rules for book-keeping, according to the Italian manner now in general use. 1701.

Merchant's accompts, in the true Italian method. 1701.

A guide to book-keepers, according to the Italian. 1709.

Accompts for landed men: or, A plain and easie form which they may observe, in keeping accompts of their estates. 1710.

Book-keeping, in a method proper to be observed by super-cargoes and factors. 1709.

The merchant's counting-house, or Waste-book instances. 1718.

The elements of Italian book-keeping, put into verse. n.d.

Book-keeping for landed men, and stewards. n.d.

A short and easy method: after which shop-keepers may state, post, and balance their books of accompts. Annexed to *Arithmetick made easie . . .* by John Ayres. 1718.

Snell's report is entitled "Observations made upon examining the Books of Sawbridge and Company [i. e., Turner & Co.]. By Charles Snell, Writing Master and Accomptant in Foster Lane, London." There are several references to what he calls fictitious entries, and considerable pains are taken to show how some of the entries cancel each other, thereby becoming ineffective. Why such entries were ever made, however, is not explained. Several pages are devoted to a proof of the fact that if the same amount be added to each side of an account, the balance does not change. Throughout the report the name "Stanhope" is referred to as such, no mention being made of the alteration to "Stangape."

An anonymous criticism of Snell's report appeared in print, and raised questions which Snell was hard put to answer. His reply begins: "Charles Snell, Writing Master and Accomptant, his answer to a paper without a name relating to the examination of the books of Sawbridge and Company [i. e., Turner & Co.]." But he talked around the points raised and said little.

Otherwise, there is no evidence that Mr. Snell created much of an impression with his report. He is not mentioned in the house of commons' "Journal" although it devotes many pages to an

analysis of Turner & Co.'s accounts, and testimony from a number of witnesses.

Charles Snell died in 1733. Massey, in *The Origin and Progress of Letters*, published thirty years later, predicted that "his works will be a lasting memorial of his abilities in his profession." And a contemporary wrote:

"Accept, dear shade! what justice makes me do,
And your most curious hand compell'd me to;
Great Velde's pen, immortaliz'd his name,
And Mat'rot's stretch'd the blowing cheeks of fame.
Bold Barbedor, in freedom did excel,
But this last worthy was reviv'd in Snell;
And Europe now, strikes to the British hand,
For justness, neatness, freedom, and command;
Yet we're divided, which in thee to boast,
Whether the penman, or accountant most."

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H. P. BAUMANN, *Editor*

AMERICAN INSTITUTE EXAMINATIONS

[NOTE.—The fact that these solutions appear in THE JOURNAL OF ACCOUNTANCY should not cause the reader to assume that they are the official solutions of the board of examiners. They represent merely the opinions of the editor of the *Students' Department*.]

EXAMINATION IN ACCOUNTING THEORY AND PRACTICE—PART I

May 12, 1932, 1:30 P. M. to 6:30 P. M.

The candidate must answer the first three questions and any two of the remaining four questions.

No. 3 (25 points):

You are retained to audit the accounts of the S Manufacturing Company for the year ended December 31, 1931. Prepare a balance-sheet, in proper form, as at the close of that year, for submission to your client.

You are furnished with the trial balance from the company's books, as of December 31st, as follows:

	Dr.	Cr.
Cash in bank	\$ 111,869.50	
Customers' notes	17,625.75	
Customers' accounts	228,429.20	
Reserve for bad debts		\$ 21,610.25
Inventories	496,267.50	
Due from Canadian branch	30,000.00	
Unexpired insurance	11,350.10	
Common stock held in treasury (1,400 shares)	118,200.00	
Land	28,000.00	
Buildings	225,000.00	
Machinery and equipment	150,400.00	
Furniture and fixtures	22,600.00	
Reserve for depreciation		46,225.50
Patents	34,000.00	
Bond discount and expense	24,000.00	
Bank loan		20,000.00
Accounts payable		37,150.00
Accrued wages		1,100.00
Accrued local taxes		4,000.00
First-mortgage, 6 per cent. bonds		450,000.00
Preferred, 6 per cent. stock (\$100 par)		250,000.00
Common stock (\$100 par)		400,000.00
Surplus		279,893.80
Profit and loss		2,762.50
Dividends on preferred stock	15,000.00	
	<u>\$1,512,742.05</u>	<u>\$1,512,742.05</u>

In the course of the audit, you obtain the following information:

- (1) The first-mortgage, 6 per cent. bonds were issued February 1, 1929, and mature February 1, 1939. Interest is payable February 1st and August 1st, and has been entered on the books as paid. There has been no change in the bond-discount-and-expense account since the issuance of the bonds.
- (2) The land and buildings are carried at appraised values, which are \$48,500 more than cost. The adjustment to appraised values was credited to surplus in 1929.
- (3) Included in customers' accounts is an account with the president of the company showing that he owes \$24,750 for advances, less salary and

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- other credits, and that he has consistently owed from \$20,000 to \$25,000 throughout the year.
- (4) Beginning February 15, 1932, and annually thereafter, the company is obligated to deposit \$25,000 in a sinking fund for retirement of the bonds.
- (5) The regular quarterly dividend on the preferred stock was declared December 15, 1931, payable January 2, 1932.
- (6) The company has discounted customers' notes aggregating \$64,000.
- (7) The Canadian branch was opened during the year. A trial balance from the books of the branch, at December 31, 1931, was as follows:

Cash.....	\$10,000	
Accounts receivable.....	18,000	
Inventory.....	12,000	
Accounts payable.....		\$10,000
Due to home office.....		30,000
	\$40,000	\$40,000

- The rate of Canadian exchange, at the date of the balance-sheet, was 85.
- (8) The patent account represents the cost of rights to manufacture a certain device. The rights were acquired in June, 1930, to run for seventeen years.

Solution:

Explanatory Adjusting Entries

(1)

Surplus.....	\$11,250
Accrued bond interest.....	\$11,250

To record the accrued bond interest on the \$450,000 6% bonds for the period August 1, 1931, to December 31, 1931, (5 months).

The accrued interest unpaid at December 31, 1931, is charged directly to surplus account rather than to profit-and-loss account, inasmuch as the operations for the year ended on December 31, 1931, have been charged with a full year's provision for interest on these bonds as the interest was paid.

(1a)

Surplus.....	\$ 4,600
Profit and loss.....	2,400
Bond discount and expense.....	\$ 7,000

To amortize the bond discount and expense over the life of the bonds (10 years) at the rate of \$200 a month. That portion applicable to the period February 1, 1929, to December 31, 1930, is charged to surplus, and that portion applicable to the year ended December 31, 1931, is charged to profit and loss.

(2)

Surplus.....	48,500
Unrealized surplus arising through appraisal of land and buildings.....	48,500

To express the unrealized appreciation on land and buildings credited to surplus account in 1929.

If the depreciation since the appraised values were spread on the books was based upon the appraised value of the building, the amount of the de-

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preciation on the appreciation charged against operations should be credited to the earned surplus account and charged against the unrealized surplus account. Because the necessary data are not given in the problem, no adjustment can be made against the unrealized surplus account set up in entry number two.

(3)

Due from officer.....	\$24,750	
Customers' accounts.....		\$24,750
To set out under separate caption, the amount due from the president of the company.		

(4)

The obligation to deposit \$25,000 on February 1, 1932, in a sinking fund for the retirement of the bonds is disclosed by means of a note on the balance-sheet.

(5)

Surplus.....	\$ 3,750	
Dividends payable on preferred stock.....		\$ 3,750
To record the dividend of 1½% on the 2,500 shares of preferred stock outstanding (\$100 par) declared on December 15, 1931, payable January 2, 1932.		
(As the dividends account already contains a full year's dividend, the charge is made to opening surplus.)		

(6)

Customers' notes.....	64,000	
Customers' notes discounted.....		64,000
To record the customers' notes discounted as at December 31, 1931.		

The contingent liability on customers' notes discounted may be shown, as an alternative, by means of a footnote appended to the balance-sheet.

(7)

Cash.....	\$ 8,500	
Customers' accounts.....	15,300	
Inventory.....	10,200	
Surplus.....	4,500	
Accounts payable.....		\$ 8,500
Due from Canadian branch.....		30,000

 To take up in the balance-sheet the assets and liabilities of the Canadian branch at the exchange rate of 85 at December 31, 1931, as shown below:

<i>Assets</i>	Amounts	
	Per books	Converted
Cash.....	\$10,000	\$ 8,500
Customers' accounts.....	18,000	15,300
Inventory.....	12,000	10,200
Total assets.....	\$40,000	\$34,000

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Less accounts payable.	\$10,000	\$ 8,500
Net assets.	<u>\$30,000</u>	<u>\$25,500</u>
Loss on exchange.		4,500
		<u>\$30,000</u>
(8)		
Surplus.		\$1,000
Profit and loss.		2,000
Patents.		\$3,000
To amortize the patents for the six months period, of 1930 (charged to surplus) and for the year 1931 (charged to profit and loss) on the basis of \$2,000 a year.		

Because of lack of information, no adjustment can be made to allocate the patent cost between the cost of goods manufactured and sold and the inventories of work in process and finished goods on hand at December 31, 1931. Therefore, the charge is made to profit-and-loss account for the year 1931, and to surplus account for the previous year.

(9)		
Surplus.	\$15,000	
Dividends on preferred stock.		\$15,000
To charge surplus account with dividends paid during the year.		
(10)		
Common stock held in treasury.	21,800	
Discount on treasury stock purchased.		21,800
To raise treasury stock to par and to credit the difference to a special surplus account.		

S MANUFACTURING COMPANY AND CANADIAN BRANCH Balance-sheet—December 31, 1931

<i>Assets</i>		
Current assets:		
Cash.	\$120,369.50	
Customers' notes.	\$ 81,625.75	
Less notes discounted.	64,000.00	17,625.75
Customers' accounts.	\$218,979.20	
Less reserve for bad debts.	21,610.25	197,368.95
Inventories.	506,467.50	
Total current assets.		\$ 841,831.70
Due from officer.		24,750.00
Unexpired insurance.		11,350.10

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Fixed assets (at cost, except for land and building, which are carried at a value of \$48,500 in excess of cost, as appraised in 1929 by ——)

Land		\$ 28,000.00		
Building	\$225,000.00			
Machinery and equipment....	150,400.00			
Furniture and fixtures	22,600.00			
Total	\$398,000.00			
Less reserve for depreciation	46,225.50	351,774.50	\$ 379,774.50	
Patents			31,000.00	
Bond discount and expense			17,000.00	
			<u>\$1,305,706.30</u>	

Liabilities and net worth

Current liabilities:

Bank loan	\$ 20,000.00
Accounts payable	45,650.00
Dividends payable	3,750.00
Accrued bond interest	11,250.00
Accrued wages	1,100.00
Accrued local taxes	4,000.00

Total current liabilities..... \$ 85,750.00

First mortgage, 6% bonds of 1939..... 450,000.00
(Beginning February 15, 1932, annual deposits of \$25,000 are required to be made in a sinking fund for bond retirement.)

Net worth:

Capital stock:

6% preferred stock (\$100 par), issued and outstanding, 2,500 shares	\$250,000.00
Common stock (\$100 par), issued 4,000 shares, in treas- ury 1,400 shares, outstanding 2,600 shares	260,000.00
	<u>\$510,000.00</u>

Surplus:

Earned surplus (exhibit B)	\$189,656.30
Discount on treasury stock pur- chased	21,800.00
Unrealized surplus arising from appraisal	48,500.00
	<u>259,956.30</u>

Total net worth..... 769,956.30

\$1,305,706.30

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S MANUFACTURING COMPANY

Working papers—December 31, 1931

	Trial balance December 31, 1931		Adjustments		Adjusted balance-sheet	
	Debit	Credit	Debit	Credit	Debit	Credit
Cash in bank.....	\$ 111,869.50		(7) \$ 8,500.00		\$120,369.50	
Customers' notes.....	17,625.75		(6) 64,000.00		81,625.75	
Customers' accounts.....	228,429.20		(7) 15,300.00 (3) \$ 24,750.00		218,979.20	\$ 21,610.25
Reserve for bad debts.....		\$ 21,610.25	(7) 10,200.00 (7)	30,000.00	506,467.50	
Inventories.....	406,267.50				11,350.10	
Due from Canadian branch.....	30,000.00				140,000.00	
Unexpired insurance.....	11,350.10				28,000.00	
Common stock held in treasury (1,400 shares).....	118,200.00		(10) 21,800.00		225,000.00	
Buildings.....	28,000.00				150,400.00	
Land.....	225,000.00				22,600.00	
Machinery and equipment.....	225,000.00				31,000.00	46,225.50
Furniture and fixtures.....	150,400.00				17,000.00	
Reserve for depreciation.....	22,600.00	46,225.50		(8) 3,000.00		
Patents.....	34,000.00			(1a) 7,000.00		
Bank discount and expense.....	24,000.00			(7) 8,500.00		
Bank loan.....		20,000.00				20,000.00
Accounts payable.....		37,150.00				45,650.00
Accrued wages.....		1,100.00				1,100.00
Accrued wage taxes.....		4,000.00				4,000.00
First mortgage 6% bonds.....		450,000.00				450,000.00
Preferred 6% stock (\$100 par).....		250,000.00				250,000.00
Common stock (\$100 par).....		400,000.00				400,000.00
Surplus.....		279,893.80 (1)	11,250.00 (1a)	4,600.00		
			(2) 48,500.00			
			(5) 3,750.00			
			(7) 4,500.00			
			(8) 1,000.00			
			(9) 15,000.00			
Profit and loss.....		2,762.50(1a)	2,400.00 (8)	15,000.00	1,637.50	191,293.80
			2,000.00 (9)			
Dividends on preferred stock.....	15,000.00					
Accrued bond interest.....		\$1,512,742.05		(1) 11,250.00		11,250.00
Unrealized surplus arising through appraisal of land and buildings				(2) 48,500.00		48,500.00
Due from officer.....				(5) 3,750.00		3,750.00
Dividends payable.....			(3) 24,750.00		24,750.00	
Customers' notes discounted.....				(6) 64,000.00		64,000.00
Discount on treasury stock purchased.....				(10) 21,800.00		21,800.00
					\$237,550.00	\$1,579,179.55

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S MANUFACTURING COMPANY

Statement of surplus for the year ended December 31, 1931

Surplus per books, January 1, 1931.....		\$279,893.80
Adjustments to correct opening surplus:		
Bond interest accrued.....	\$11,250.00	
Bond discount and expense.....	4,600.00	
Unrealized appraisal surplus.....	48,500.00	
Preferred dividend not set up.....	3,750.00	
Patent expiration.....	1,000.00	69,100.00
Surplus as adjusted, January 1, 1931.....		\$210,793.80
Deduct:		
Preferred dividends paid in 1931.....	\$15,000.00	
Net loss for the year.....	\$1,637.50	
Loss on exchange fluctuation.....	4,500.00	6,137.50
Surplus, December 31, 1931.....		<u>\$189,656.30</u>

The solution of problem No. 4 in this examination will be published in THE JOURNAL OF ACCOUNTANCY for September, 1932.

No. 5 (14 points):

On December 31, 1929, Corporation Y, a holding company, owned 80 per cent. of the no-par-value common capital stock and 90 per cent. of the non-voting cumulative 7 per cent. preferred capital stock of Company A. Dividends on preferred stock had been paid to December 31, 1929.

The position of the capital account of Company A, and the holdings of Corporation Y, remained unchanged to December 31, 1931, no dividends having been paid during the years 1930 and 1931.

At December 31, 1929, Company A's books showed the following:

Capital stock, preferred—7 per cent. cumulative—issued and outstanding, 5,000 shares, \$100 each.....	\$500,000
Capital stock, common—no par value—issued and outstanding, 10,000 shares.....	50,000
Earned surplus—balance.....	9,091

Company A's operations for the year 1930 resulted in a net loss of \$75,000, but during the year 1931 its net earnings were \$140,000.

State the minority interests in Company A as they would appear in a consolidation of the accounts of Corporation Y and Company A at December 31, 1930, and also at December 31, 1931.

Solution:

The solution of this problem hinges on the relative interests of the two classes of stock in the surplus (or deficit), and the relative interests depend upon the rights of the preferred stock.

The preferred stock is known to have a par value of \$100 a share, to be entitled to 7 per cent. cumulative dividends, and to be non-voting. The last feature is of no importance in the solution of this problem. The fact that the preferred stock is preferred as to the 7 per cent. dividend, and has a right to unpaid dividends of any years before any dividends may be paid on the common stock, does not of itself give the preferred stock a preference of assets in the event of liquidation, nor the right to further participation in the profits.

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Since authorities are not in agreement as to the inherent and the implied rights of preferred stock (reference should be made to the statute or to the charter), this solution is based upon the assumption that the preferred stock is preferred as to the assets, and is non-participating. This assumption must be made, as the problem does not indicate the amount the common stockholders are to receive in liquidation, nor the amount of dividends they are to receive before any participation feature becomes operative.

COMPUTATION OF MINORITY INTERESTS IN COMPANY A

	Preferred stock	Common stock
December 31, 1930:		
Capital stock.....	\$500,000.00	\$50,000.00
Surplus:		
Balance, January 1, 1930....	\$ 9,091.00	
Loss of 1930.....	75,000.00	
	<hr/>	
Deficit, December 31st....	\$ 65,909.00	
Applied against the common stock until the stock is wiped out.....	50,000.00	50,000.00
	<hr/>	
Remainder—applied against the preferred....	\$ 15,909.00	15,909.00
	<hr/>	
Book value of stock.....	\$484,091.00	\$
Percentage of minority interest.....	10%	20%
	<hr/>	
Amount of minority interest.....	\$ 48,409.10	\$
	<hr/>	

Note.—The unpaid cumulative dividends at December 31, 1930, need not be considered, as no surplus existed at that date.

December 31, 1931:		
Capital stock.....	\$500,000.00	\$50,000.00
Surplus:		
Balance, December 31, 1930..	\$ 65,909.00	
Profit of 1931.....	140,000.00	
	<hr/>	
Surplus, December 31st ...	\$ 74,091.00	
Reserved for unpaid cumu- lative preferred divi- dends—14% of \$500,000	70,000.00	70,000.00
	<hr/>	
Remainder—to common...	\$ 4,091.00	4,091.00
	<hr/>	
Book value of stock.....	\$570,000.00	\$54,091.00
Percentage of minority interest.....	10%	20%
	<hr/>	
Amount of minority interest.....	\$ 57,000.00	\$10,818.20
	<hr/>	

The minority interest should appear on the liability side of the consolidated balance-sheet, as follows:

At December 31, 1930—	Preferred stock	Common stock
Minority interests in Company A:		
Preferred stock—10%.....	\$ 48,409.10	
Common stock—20%.....	<u> </u>	\$48,409.10
At December 31, 1931—		
Minority interests in Company A:		
Preferred stock—10%.....	\$ 57,000.00	
Common stock—20%.....	10,818.20	\$67,818.20

No. 6 (14 points):

Company A has 500,000 shares of capital stock issued and outstanding, owns 350,000 shares of capital stock of Company B and has a surplus of \$1,050.

Company B has 400,000 shares of capital stock issued and outstanding, owns 45,000 shares of capital stock of Company A and has a deficit of \$2,100.

A consolidated balance-sheet of companies A and B is being prepared. Determine the amount of the deficit of Company B applicable to the minority stockholders' interest in that company.

Solution:

In this problem, we find that Company A owns $87\frac{1}{2}$ per cent. (350,000 shares of a total of 400,000 shares outstanding), of Company B, and that Company B, in turn, owns 9 per cent. (45,000 shares of a total of 500,000 shares outstanding), of Company A. It is, therefore, necessary to determine the book values of the surplus accounts in order to ascertain the amount of the deficit of Company B applicable to the minority stockholders' interest in that company.

Let A = the surplus account of Company A, and

B = the surplus account of Company B.

(1) Then $A = \$1,050.00 + .87\frac{1}{2}B$, and

(2) $B = \$2,100.00 + .09A$

Substituting (1) for A in the equation (2), we find,

$B = -\$2,100.00 + .09(\$1,050.00 + .87\frac{1}{2}B)$, or

$B = -\$2,100.00 + \$94.50 + .07875B$, or

$.92125B = -\$2,005.50$, or

$B = -\$2,176.93$, the amount of the deficit of Company B.

The minority interest of $12\frac{1}{2}$ per cent. (50,000 shares of the total of 400,000 shares outstanding) of the deficit of Company B, will be, therefore, $12\frac{1}{2}$ per cent. of \$2,176.93, or \$272.12.

This amount may be proved, by continuing the solution to learn the value of A, as follows:

Substituting the value of B in the equation (1), we find,

$A = \$1,050.00 + .87\frac{1}{2}(-\$2,176.93)$, or

$A = \$1,050.00 - \$1,904.81$, or

$A = -\$854.81$

The consolidated deficit of \$1,050 (the deficit of Company B amounting to \$2,100 less the surplus of Company A amounting to \$1,050), will be apportioned in the consolidated balance-sheet as follows:

Minority interest: $12\frac{1}{2}\%$ of \$2,176.93	= \$ 272.12
Holding company's interest: 91% of \$854.81	= 777.88
Total deficit.....	<u>\$1,050.00</u>

Students' Department

No. 7 (14 points):

The Products Company, Ltd., Canada, keeps its records on a nominal dollar basis, and presents the following balance-sheet as at December 31, 1930:

<i>Assets</i>		
Cash.....		\$ 10,000
Accounts receivable.....		300,000
Inventories.....		250,000
Fixed assets (U. S. dollar cost at date of acquisition).....		100,000
		<u>\$660,000</u>
<i>Liabilities</i>		
Notes payable.....		\$ 15,000
Accounts payable.....		150,000
Due to parent company (U. S. dollars).....		200,000
Capital.....		150,000
Surplus:		
Beginning of year.....	\$ 25,000	
Profit for year.....	120,000	145,000
		<u>\$660,000</u>

You are requested to convert this statement to a United States currency basis for consolidation with the parent company's balance-sheet. Assume that the Canadian dollar is worth \$.80 in United States funds. Explain your treatment of each item.

The following information is available:

Accounts receivable—all Canadian funds

Notes payable—all Canadian funds

Accounts payable—\$30,000 payable in Canadian funds and \$120,000 in United States funds

Inventories—

Raw material purchased in Canadian funds..... \$ 20,000

“ “ “ in United States funds..... 100,000

Goods in process..... 130,000

This item includes material purchased both in United States and Canada, with labor all performed in Canada. The total purchases for the year average, approximately, 85 per cent. from United States and 15 per cent. Canadian. The labor cost approximates 13 per cent. of the cost of materials.

Assume no inter-company profit on materials purchased from the parent company.

Solution:

THE PRODUCTS COMPANY, LTD.

Statement showing the conversion to a United States currency basis December 31, 1930:

	Nominal dollar basis	Rate of conversion	United States currency basis
<i>Assets</i>			
Cash.....	\$ 10,000.00	\$.80	\$ 8,000.00
Accounts receivable.....	300,000.00	.80	240,000.00

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Inventories:

Raw material purchased in Canadian funds.....	\$ 20,000.00	\$.80	\$ 16,000.00
Raw material purchased in United States funds.....	100,000.00	1.00	100,000.00
Goods in process.....	130,000.00	note (1)	123,557.52
Fixed assets.....	100,000.00	1.00	100,000.00
Total.....	<u>\$660,000.00</u>		<u>\$587,557.52</u>

Liabilities and net worth

Notes payable.....	\$ 15,000.00	\$.80	\$ 12,000.00
Accounts payable:			
Payable in Canadian funds.....	30,000.00	.80	24,000.00
Payable in United States funds....	120,000.00	1.00	120,000.00
Due to parent company.....	200,000.00	1.00	200,000.00
Capital.....	150,000.00	note (2)	150,000.00
Surplus—beginning of the year.....	25,000.00	note (2)	25,000.00
Profit for year.....	120,000.00	note (2)	56,557.52
Total.....	<u>\$660,000.00</u>		<u>\$587,557.52</u>

Note (1):

Goods in process inventory.....	\$130,000.00		
The labor cost included in the goods in process inventory approximates 13% of the cost of materials. The labor cost is, therefore, 13/113 of \$130,000 or.			
	14,955.75	\$.80	\$ 11,964.60

The balance represents the material cost of.....	\$115,044.25		
Of this amount, approximately 85% was purchased in the United States.....			
	97,787.61	1.00	97,787.61
and the remainder in Canada.	<u>\$ 17,256.64</u>	.80	<u>13,805.31</u>

The total value in United States funds is			<u>\$123,557.52</u>
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Note (2):

The capital-stock account is converted at the dollar price paid by the parent company, and the surplus account at the beginning of the year is carried over at the balance determined at January 1, 1930. Any adjustment necessary to bring the subsidiary balance-sheet into balance after conversion into United States funds is arbitrarily stated in the account "profit for the year."

The practice of converting the current assets and the current liabilities at the rate of exchange current on the balance-sheet date (\$.80) has been followed in the above solution.

Correspondence

FORM OF BALANCE-SHEET

Editor, THE JOURNAL OF ACCOUNTANCY:

I am employed as a senior by a certified public accountant and as such have considerable occasion to observe the procedure recommended in the *Federal Reserve Bulletin* entitled *Verification of Financial Statements*, revised May, 1929. It appears that the outlines and recommendations were prepared by a committee from the American Institute of Accountants.

The firm I am with has adopted and uses in reports the outline of the balance-sheet recommended. Frequently some client objects to some portions of the arrangement, contending that they are not essential, as the audit report itself is not usually presented to the banker.

I have observed numerous balance-sheets of other accounting firms and they usually start out on the asset side with cash on hand and in banks, followed by accounts receivable, then notes receivable; and on the liability side with accounts payable, then notes payable, without any distinction, on the balance-sheet itself, between secured, unsecured, current and past due items.

Before making loans the bank usually requires a balance-sheet on its own form, which varies considerably from the one recommended in the bulletin. It has been said also that many bankers have never even heard of the booklet *Verification of Financial Statements*.

I should like to inquire what the practice is among the certified public accountants in the eastern states regarding the form of the outline of the balance-sheet as compared with the one recommended in the bulletin and what importance attaches generally to the booklet *Verification of Financial Statements*, submitted by the federal reserve board.

Would not a short discussion of this question be of general interest, if presented in your columns?

Sincerely yours,

A SUBSCRIBER.

Los Angeles, California

[The question raised by this correspondent is of great importance and THE JOURNAL OF ACCOUNTANCY would welcome expressions of opinion from other accountants throughout the country. It is difficult to believe that bankers have never heard of the booklet, *Verification of Financial Statements*, because their attention has been drawn to it repeatedly by the federal reserve board. There are many firms which regard the outline contained in the pamphlet as the minimum procedure. There may, however, be accountants who do not follow the suggestions made in the pamphlet. A frank discussion of the subject might be helpful.—Editor, THE JOURNAL OF ACCOUNTANCY.]

Book Reviews

GENERAL SALES TAXATION, by ALFRED D. BUEHLER. *The Business Bourse, New York.* 378 pages.

The great game of "balancing the budget" which has been playing all over the world for the last fifteen years has finally reached the United States in acute form. Literally none of us is so poor or so rich as to be uninterested in the solution of the problem of making both ends meet in federal, state and municipal finances. Having gone to the limit in laying taxes on property, incomes and imports, congress has been forced to examine, discuss and in part adopt taxes on sales. The original proposition to levy a low uniform rate on all sales met with defeat at the hands of a runaway house, but in view of the belief of many experts that the act of 1932 will fail in its purpose of balancing the budget it is more than likely that the next congress will have to consider again the general sales tax. What that tax means, how it would affect business, how it has worked where adopted, and whether, once adopted, it is apt to remain a permanent source of revenue, are the questions Dr. Buehler attempts to answer in his timely study, *General Sales Taxation*.

To the average man the general sales tax may be a new idea, yet students of taxation problems would tell him that it is the most ancient of methods of raising government revenues. "Athens laid various taxes on commodities in the markets and on sales of landed property." "The taxation of sales of specific commodities, like salt, was common in Egypt, China, India and other ancient states." In Rome "Augustus laid a tax of one per cent. upon all articles, movable goods, or fixtures, sold in the markets." In European countries in general the sales tax has formed a principal source of revenue from the middle ages down to the present time. It has never been popular, has usually been inequitable, but has generally been productive of great revenues, the only feature of interest to governing powers. Nevertheless in spite of its productivity, it is Dr. Buehler's general conclusion that nearly all nations which have adopted it are earnestly seeking ways to get rid of it, or at least to ease the burden through exemptions, classifications or progressive rates. Needless to say, such modifications are always the result of political pressure.

The first ten chapters are devoted to the history and data of the general sales taxes and modifications of it as found in some thirty foreign nations, and also in eight states of America. It may be a surprise to most readers to learn that so many states already levy sales taxes, but Pennsylvania, for one, has done so for over one hundred years. Chapter 3 has an instructive résumé of the arguments for and against the sales tax at the hearings held by the ways and means committee. More or less academic now since the bill was defeated in the house and the substitutes as enacted are selected sales taxes, not general, it is worth reading for the light it throws on possible action of the next congress. Chapters 11-19 contain general discussions of the problems of administration, incidence of the tax, its effects upon business, competition, distribution and the consumer, and the place it occupies and is likely to occupy in the fiscal systems of various nations. Dr. Buehler recognizes that the general sales tax can not be dealt with in vacuo. All taxes must be paid from income, so the cumulative effect of all forms of taxation must be considered if we are to grasp the whole problem.

He therefore gives due attention to other taxes, particularly as to their productivity. In chapter 20 the author discusses the probable effect of the act of 1932 as it left the house, and it is pertinent only as to the provisions retained in the final enactment. In chapter 21 he summarizes the main features and results of general sales taxation in twenty-six foreign nations. The impression one receives is that the tax is undoubtedly highly productive, but the relatively small increases, or actual decreases, in revenues from 1929 to 1931 strongly reflect the decline in business, leaving one to surmise for himself which is the cause and which the effect.

After duly warning his readers of the difficulty of drawing sound conclusions from the data he has studied, due to the complications of the post-war financial muddle, the world-wide depression, the injection in some cases of extraneous motives (e.g. the attempt in some states to handicap the chain-stores through taxes), etc., Dr. Buehler gives his final opinion that while the general sales tax may be approved as an emergency measure in balancing the budget, "The conclusion is therefore reached that the experience of West Virginia and other American states and the nations which employ a general sales tax does not justify a general sales tax as a normal source of federal or state revenue in this country" (p. 260).

The formidable list of citations from official reports and books of reference, covering over fifty pages, sufficiently attests the labor and care Dr. Buehler has expended on his timely and informative study. His conclusions in such a controversial subject are open to debate of course, but anyone who questions his data does so at his peril. It is a book one could wish to place in the hands of every member of the next congress, to say nothing of state legislators, before any further general sales taxation is attempted.

W. H. LAWTON.

Accounting Questions

[The questions and answers which appear in this section of THE JOURNAL OF ACCOUNTANCY have been received from the bureau of information conducted by the American Institute of Accountants. The questions have been asked and answered by practising accountants and are published here for general information. The executive committee of the American Institute of Accountants, in authorizing the publication of this matter, distinctly disclaims any responsibility for the views expressed. The answers given by those who reply are purely personal opinions. They are not in any sense an expression of the Institute nor of any committee of the Institute, but they are of value because they indicate the opinions held by competent members of the profession. The fact that many differences of opinion are expressed indicates the personal nature of the answers. The questions and answers selected for publication are those believed to be of general interest.—EDITOR.]

BAD DEBT LOSSES IN PERIODS OF DEPRESSION

Question: We have been requested to charge separately to surplus bad debt losses considered to be unusual losses during the present period of depression, and the clients submit that, at least in part, such unusual losses are due to inaccuracies in bad debt reserves for prior periods.

Similarly, requests have been made that we separately charge to surplus computed amounts considered to be declines in inventory values due to the market trend of the past year. The argument submitted in this instance is that the management had no control over these price declines and therefore the item is of an unusual nature and not a proper charge to operations. In particular, we have had this request in one instance wherein the computation of the decline is based on actual items included in the beginning and ending inventories at different values.

Answer No. 1:

- (a) The treatment in the accounts of unusually large losses from bad debts due to the present business depression.
- (b) The treatment of inventory write-downs necessitated by price declines.

The conditions described in your correspondent's letter are not peculiar to one or two companies, and we venture to say that practically all industrial companies were faced with the same problems in a greater or lesser degree at the close of the past year.

With regard to (a) it is, of course, obvious that losses from bad debts are greater in periods of depression than in periods of prosperity, and we believe it has been the experience of industrial companies generally that considerable increases have been necessary in provisions for bad debts in the past two years. While it would undoubtedly be conservative practice to establish reasonably substantial reserves in prosperous times to provide for possible future losses from bad debts, we do not think that failure to provide ample reserves in the past would warrant charging to surplus losses now incurred which conceivably

might have been provided for previously. However, reserves for bad debts are largely estimates at best, and probably it will be found that the necessity for making unusually large provisions at this time is not due principally to inaccuracies in previous reserves but is a result of business conditions arising during the current year, which could not have been reasonably foreseen. It follows, therefore, that bad debt provisions should all be absorbed in the profit-and-loss account, and it has been our experience that this practice is being followed practically without exception. Such charges may, of course, properly be shown as a separate item in the profit-and-loss statement.

With regard to (b) it may be of interest to quote the following from the Institute's *Special Bulletin No. 7* issued in December, 1920:

"It was agreed that it would be in order to show operating profits on the basis of inventories at cost (less usual provisions for obsolete stock, etc.) and the adjustment from cost to market as a special charge either against profits or surplus, provided that the procedure adopted was clearly described. In point of fact, the loss from the decline of prices is an offset to the extraordinary profits from increasing prices realized over a series of years and not an operating loss of the year, but as the extraordinary profits in the past years have been included in the ordinary profits, any statement this year either must similarly absorb the corresponding decline or show clearly that this decline has not been absorbed in the operating results."

While the present conditions in some respects are comparable to those existing in 1920, it should be borne in mind that in 1920 price declines took place over a comparatively short period; whereas in the present instance the trend of market prices has been downward over a period of some two years. There would not appear to be much point to the arguments advanced by your correspondent's client that the price decline is of an unusual nature because the management had no control over prices. Price declines and advances occur from time to time and are usually beyond the control of management, and it would be quite impracticable to attempt to eliminate from operating statements the effect of changes in price levels either of purchases or sales or of fluctuations in volume. Furthermore, we are satisfied that the treatment of an inventory write-down under present conditions as a surplus charge would be looked upon with disfavor by bankers and investors generally, and in any analysis of operating results the write-down would be applied against the current profit.

We do not think the fact that some of the items upon which the price declines are computed appear in both the opening and closing inventory has any particular bearing on the question. It simply means that the prices of these items have declined during the year and the difference must be absorbed in the write-down. It does, however, raise the question of whether a further write-down is required for obsolete or slow-moving stock.

Answer No. 2: It is quite rare to find a commercial business of any size which can accurately ascertain at the end of each accounting period the exact amount of the losses which will be sustained in collection of the accounts receivable at a particular date. It is, therefore, generally admitted that the balance-sheet allowance for bad debts, with the resulting charge to the income account, is at best a careful estimate. There may be an occasional unusual case in which there would be justification for charging bad debts to surplus, but, as a rule, such charges should be made to the current income account.

If a concern has set up reasonable estimates of anticipated bad debt losses, and if, due to general business conditions such as exist at the present time, the amount of losses is abnormally high, then it would seem that such bad debt losses should be charged to the income account of the period in which the accounts are determined to be uncollectible.

One of the hazards of any business which carries an inventory is the variation in inventory values due to market fluctuations. Inasmuch as such market variations are an essential part of the conduct of such a business, there seems to be no justification whatever for ignoring such variations as proper charges to the income account. In any year in which there are abnormal declines, it might make a better presentation to show such abnormal amount as a separate deduction on the income account. There might conceivably be a case in which there has been a radical, and probably permanent, change in market values of some inventory item, and the inclusion of the full amount of such change might have no particular relation to the operations of the year in question. For example, if some new process for producing raw materials had been discovered, and as a result there had been a radical decline in the market price and it was fairly certain that such reduced price would continue, then such a decline might preferably be set out separately in the income account, but might be charged to surplus, provided adequate disclosure of such surplus charge were made.

We think it essential that in cases in which justification can be found for charging to surplus items of a class which ordinarily would be charged against the income account there should be adequate disclosure of the amounts so charged to surplus and the nature of such charges.

On the whole, the questions raised in your letter are of common occurrence under present business conditions, and usually are due to a desire to make the results of operations appear better than they actually are and to a failure to face the facts.

Answer No. 3: As a matter of basic principle, every so-called surplus adjustment is, in fact, a correction of the operating results of some year. There are cases in which losses arise which clearly apply to the operations of a prior year and may, therefore, be properly charged against surplus. In a restatement of the surplus account, analyzed as to earnings of prior years, such an adjustment would be directly applied against the operations of the particular year affected.

If it can be demonstrated logically that a reserve for bad debts, at the beginning of the year, was insufficient on the basis of facts ascertainable at the time, the relative increase in reserve for bad debts should be treated as a charge against surplus.

So far as provisions for market decline in inventory are concerned, such provisions should be made by charges against operations in the year in which the declines occur.

Here, again, if it can be clearly demonstrated that inventories at the beginning of the year have, for one reason or other, been overstated, an adjustment of such inventory at the beginning of the year may be made by a charge against surplus, but the provision for such decline as may have occurred during the current period should be charged against current operations.

Accounting Questions

As to inventory, it should also be noted that it is accepted practice to provide for substantial declines, which have occurred subsequent to the date of the balance-sheet (but prior to the issuance of statements), by an appropriation of surplus. This provision is made for the purpose of stating the balance-sheet conservatively on the basis of latest available information, but the losses represented by such an appropriation of surplus should be absorbed in the operations of the ensuing period and the appropriation should be reversed.

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Addresses of Periodicals:

Accountant, 8 Kirby Street, London, E. C. 1, England.
Accountants' Journal (Eng.), 8 Kirby Street, London, E. C. 1, England.
Accountants' Magazine, 23 Rutland Square, Edinburgh, Scotland.
Accounting Review, 217 Commerce Building, University of Illinois, Urbana, Illinois.
American Accountant, 225 Broadway, New York City.
Black Diamond, Manhattan Building, Chicago, Illinois.
Bus Transportation, 330 West 40th Street, New York City.
Canadian Chartered Accountant, 10 Adelaide Street East, Toronto, Canada.
Certified Public Accountant, National Press Building, Washington, D. C.
Corporate Practice Review, 11 West 42nd Street, New York City.
Cost Accountant, 6 Duke Street, St. James's, London, S. W. 1, England.
Cost and Management, 81 Victoria Street, Toronto, Canada.
Executive's Service Bulletin, 1 Madison Avenue, New York City.
Fortune, 205 East 42nd Street, New York City.
Journal of Accountancy, 135 Cedar Street, New York City.
Journal of the American Waterworks Association, 2411 North Charles Street, Baltimore, Maryland.
L. R. B. & M. Journal, 90 Broad Street, New York City.
N. A. C. A. Bulletin, 1790 Broadway, New York City.